

An atypical endoscopic treatment for “Buried Bumper Syndrome”

OPEN
ACCESS

Percutaneous endoscopic gastrostomy (secured using a balloon or by a bumper system) is a widely used method for feeding and nutritional support in patients requiring long-term enteral nutrition. Although considered a safe method, complication rates vary from 0.4% to 22.5% of cases [1]. Buried bumper syndrome (BBS) represents a rare but important complication, with an incidence between 0.3% and 2.4%, and is defined as the migration of the internal bumper anywhere between the gastric wall and the skin, along the gastrostomy tract [2]. Management can be difficult. Historically represented by surgical methods, management now involves a variety of endoscopic devices, including needle-knives, wire-guided papillotome, or the Flamingo-type sphincterotome [3].

We present the case of a 62-year-old patient who underwent gastrostomy with a bumper fixation system by the peroral pull technique (the Ponsky method), during prolonged hospitalization for cardiorespiratory arrest secondary to acute myocardial infarction. Owing to low compliance and repeated attempts of self-extraction, the gastrostomy was removed using the “cut and push” method. Afterwards, the patient presented with cutaneous discharge of gastric fluid, painful induration, and superficial periorificial ulceration. Diagnosis of BBS was suspected following a computed tomography, which highlighted the persistence of a foreign body in contact with the anterior gastric wall (► Fig. 1), and confirmed by upper endoscopy, which showed the presence of a 2-cm submucosal lesion, with a central millimetric orifice and continuous purulent discharge (► Fig. 2).

The removal technique consisted of endoscopic submucosal dissection (ESD) using a 2.0 DualKnife device (Olympus,

Tokyo, Japan), assisted by an elastic traction system. Dissection further exposed the buried bumper, which was later removed using a simple biopsy forceps. Finally, the remaining cavity was closed with four hemostatic clips (► Video 1). We report no intra- or post-procedural complications during the 3-month endoscopic follow-up.

Multiple cases describing ESD as a treatment method for BBS are reported in the literature [4,5]. Advantages include a low complication rate and a short recovery time. In experienced centers, ESD appears to be a safe, effective, and less invasive option for the treatment of BBS.

Endoscopy_UCTN_Code_CPL_1AH_2AI

Conflict of Interest

The authors declare that they have no conflict of interest.

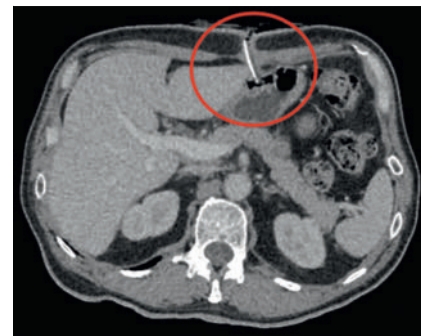
The authors

Matei-Alexandru Cozma¹, Maxime Saunier², Arthur Berger², Frank Zerbib²

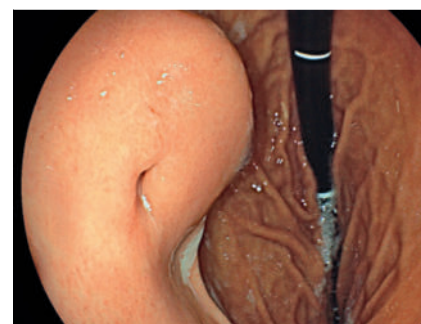
- 1 Gastroenterology and Hepatology Department, Colentina Clinical Hospital, Bucharest, Romania
- 2 Gastroenterology, Hepatology and Digestive Oncology Department, Haut-Lévêque Hospital, Bordeaux, France

Corresponding author

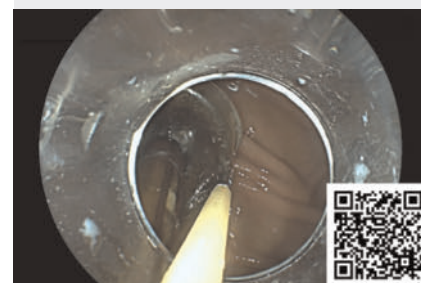
Matei-Alexandru Cozma, MD, PhD
Gastroenterology and Hepatology
Department, Colentina Clinical Hospital,
19-21 Ștefan cel Mare Av., București 020125,
Romania
matei.cozma@gmail.com



► Fig. 1 Computed tomography image of the internal bumper of the gastrostomy in the anterior abdominal wall.



► Fig. 2 Endoscopic view of the submucosal cavity containing the internal bumper of the gastrostomy.



► Video 1 Dissection of the abscessed cavity in the anterior gastric wall, followed by successful removal of the internal bumper and closure of the incision.

References

- [1] Cyrany J. Buried bumper syndrome: a complication of percutaneous endoscopic gastrostomy. *World J Gastroenterol* 2016; 22: 618. doi:10.3748/wjg.v22.i2.618
- [2] Boeykens K, Duysburgh I. Prevention and management of major complications in percutaneous endoscopic gastrostomy. *BMJ Open Gastroenterol* 2021; 8: e000628. doi:10.1136/bmjgast-2021-000628
- [3] Chong VH. Management of buried bumper syndrome. *QJM: An International Journal of Medicine* 2019; 112: 153–153. doi:10.1093/qjmed/hcy176
- [4] Bathobakae L, Leone C, Elagami MM et al. Acute buried bumper syndrome: a case report. *Cureus* 2023; 15: e36289. doi:10.7759/cureus.36289
- [5] Curcio G, Granata A, Ligresti D et al. Buried bumper syndrome treated with HybridKnife endoscopic submucosal dissection. *Gastrointest Endosc* 2014; 80: 916–917

Bibliography

Endoscopy 2024; 56: E751–E752

DOI 10.1055/a-2381-4938

ISSN 0013-726X

© 2024. The Author(s).

This is an open access article published by Thieme under the terms of the Creative Commons Attribution License, permitting unrestricted use, distribution, and reproduction so long as the original work is properly cited.

(<https://creativecommons.org/licenses/by/4.0/>)

Georg Thieme Verlag KG, Rüdigerstraße 14,
70469 Stuttgart, Germany



ENDOSCOPY E-VIDEOS

<https://eref.thieme.de/e-videos>



E-Videos is an open access online section of the journal *Endoscopy*, reporting on interesting cases and new techniques in gastroenterological endoscopy. All papers include a high-quality video and are published with a Creative Commons CC-BY license. *Endoscopy E-Videos* qualify for HINARI discounts and waivers and eligibility is automatically checked during the submission process. We grant 100% waivers to articles whose corresponding authors are based in Group A countries and 50% waivers to those who are based in Group B countries as classified by Research4Life (see: <https://www.research4life.org/access/eligibility/>).

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