

# Early Presentation of Buried Bumper Syndrome

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## Keywords

Buried bumper syndrome · Percutaneous endoscopic gastrostomy · Early presentation · Complication

## Síndrome da Campânula Interna: Apresentação Precoce

## Palavras Chave

Síndrome campânula interna · Gastrostomia endoscópica percutânea · Apresentação precoce · Complicação

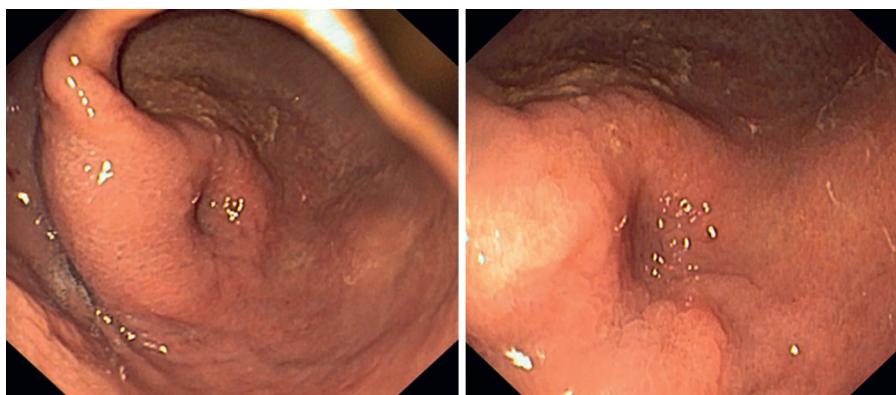
## Case Report

A 71-year-old female with Alzheimer disease, submitted to a percutaneous endoscopic gastrostomy (PEG) 3 days before, without immediate complications, presented to the emergency department with acute abdominal pain, exacerbated by attempts to infuse feeding solution through the tube. Stoma showed no signs of infection or peristomal leakage (Fig. 1). The external bumper was juxtaposed to the skin surface and it was not possible to mobilize the tube. Flushing the tube with water was difficult and exacerbated the patient complaints. On gastroscopy, the internal bumper was not visible, and the anterior face of the stomach showed an elevated round area with normal mucosa and a central depression, com-

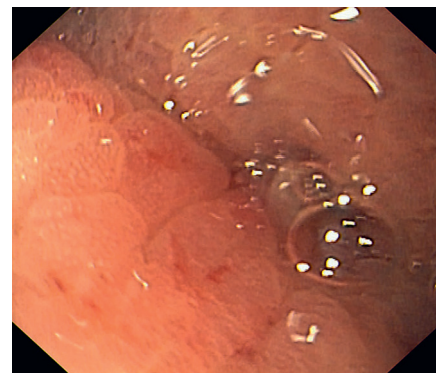


**Fig. 1.** External bumper of percutaneous endoscopic gastrostomy juxtaposed to the skin. No signs of infection or peristomal leakage are visible.

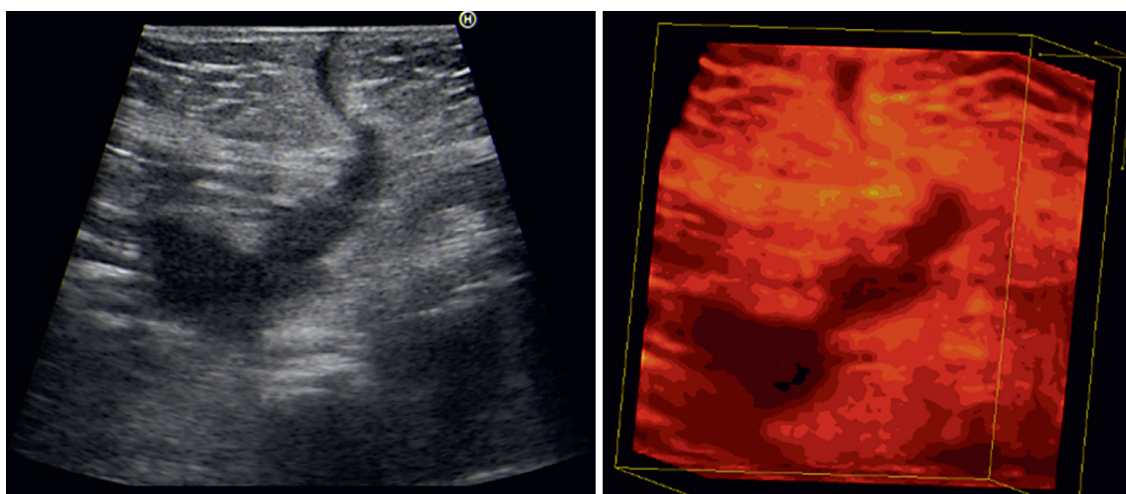
patible with the internal bumper totally embedded in the stomach wall (Fig. 2). After water instillation, a fistulous orifice adjacent to the bulging area was identified (Fig. 3). As the internal bumper was collapsible, it was removed by simple external traction under endoscopic control, without resistance and with no signs of complications on the stomach wall. Introduction of a Foley catheter through the PEG orifice under endoscopic visualization was attempted without success, probably due to the creation of an alternative tract on the gastric wall.



**Fig. 2.** Internal bumper totally embedded in the stomach wall.



**Fig. 3.** Fistulous orifice adjacent to the buried bumper.



**Fig. 4.** Abdominal ultrasound showing the tube and bumper tract, with no collections or free fluid.

The patient referred significant pain relief after the procedure and was admitted to the gastroenterology department for surveillance and antibiotic prophylaxis with ciprofloxacin for 5 days.

As the patient still maintained some oral intake, it was decided to perform fractional diet with oral nutritional supplements and intravenous fluids.

Follow-up abdominal ultrasound performed 24 h after gastrostomy tube removal and immediately before discharge showed the previous tube and bumper tract, with no signs of complications (Fig. 4).

According to the will of the patient and her family, a new PEG was not performed. The patient was discharged 5 days after admission, with a follow-up consultation in order to schedule a new procedure.

## Discussion

PEG is a relatively safe and effective method of nutrition delivery for patients who require long-term enteral nutrition [1]. Major complications related to the procedure are rare. Buried bumper syndrome represents a severe complication, occurring in 0.3–2.4% of the patients [1], as a consequence of excessive compression of the tissue between the external and internal fixation bumpers [2] in which the internal bumper migrates and becomes lodged anywhere between the gastric wall and the skin along the PEG tract [3]. Although it usually corresponds to a late complication [2], months to years after placement, it can also occur in an acute (<30 days after placement) [1] setting. This is the earliest case reported in the

literature [1, 4]. Early diagnosis and prompt management are required to avoid further complications [2].

The removal method will depend on the type of the PEG set and the depth of disc migration. In this particular case, as the PEG system was equipped with a soft internal retention device, it was safely amenable to simple pulling extraction without resistance, with no potential complications apart from slight bleeding.

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### Statement of Ethics

This study did not require informed consent or review/approval by the appropriate ethics committee.

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### Disclosure Statement

The authors have no conflicts of interest to declare.

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