

CHALLENGES OF USING NON-BALLOON RETAINED PEG TUBES FOR LONG-TERM ENTERAL FEEDING



Percutaneous endoscopic gastrostomy (PEG) tubes serve as the favorable route of feeding and nutritional support in patients with a functional gastrointestinal system who require long-term enteral nutrition (usually >4 weeks).¹

Types of PEG tubes based on internal retention mechanisms and tube removal technique—

PEG tubes with internal mushroom tip bumper²

- Removable by gentle external traction²

PEG tubes with rigid internal fixation devices (bumper)³

- Removable by endoscopy or through 'cut and push' technique³

Balloon retained tubes^{3,4}

- Balloon which is inflated with sterile water after insertion (smaller tube sizes require less water for adequate balloon inflation)^{3,4}

DID YOU KNOW ?

In the 'cut and push' technique, the feeding tube is cut close to the stoma and the remnant is pushed into the gastric lumen and passed out in stool.³

Complications of using non-balloon retained PEG tubes with respect to technique of tube removal

Mushroom-retained PEG tubes

- Excessive force applied while external traction for tube removal may disrupt even a well established gastrocutaneous canal⁵

Rigid internal bumper PEG tubes

- Endoscopic removal may not be cost-effective⁵
- Limitations of 'cut and push' method—
 - Risk of small bowel obstruction⁶
 - Can only be performed in patients with no risk of distal adhesions or strictures⁷

Balloon gastrostomy tubes usually come out with gentle traction after the balloon is deflated.³

Other advantages include—

- More easily changed without the need of hospital intervention (a trained HCP, caregiver or patient can be taught to change the tube)⁸
- Can be used when repeated endoscopic procedures are not an option or present a risk⁸

Replacement of PEG tubes

Initial PEG tubes will require replacement in case of—



Occlusion/clogging, unresponsive to traditional declogging measures^{2,9}



Tube breakage or malfunctioning^{2,9}



Accidental dislodgement^{2,9}

Disruption of a well-established gastrocutaneous canal by mushroom-tip PEG tube removal may lead to resultant intraperitoneal placement of the new tube.⁵

- Use of gastrostomy tubes with a balloon tip as replacement tube is usually preferred to minimize the risk of disruption of the old track²

Use of a balloon gastrostomy tube as a primary tube of choice offers a new approach to enteral tube feeding in the community.³

OUR SOLUTION

Helping your patients face the use of gastrostomy tubes, possibly for a lifetime, can be a challenge. AVANOS* variety of quality feeding tubes and accessories helps you make the right choice for your patient.⁴ These tubes are available in both ENFit® and non-ENFit® variants.^{4,10}



MIC*G tube

Indicated for patients requiring continuous enteral feeding⁴
Inflatable silicone internal retention balloon⁴
SECUR-LOK* external retention ring⁴



MIC*Bolus G tube

Used for patients who are on bolus feeding regimen⁴
Inflatable silicone internal retention balloon⁴
SECUR-LOK* External Retention Ring⁴

References:
1. Vudayagiri L, Hoilat GJ, Gemma R. Percutaneous Endoscopic Gastrostomy Tube. [Updated 2021 Feb 9]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2021 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK535371/>. 2. Shah R, Shah M. Gastrostomy Tube Replacement. [Updated 2020 May 5]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2021 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK482422/>. 3. Ojo O. Balloon gastrostomy tubes for long-term feeding in the community. Br J Nurs. 2011; 20(1):34-8. 4. Product data sheet, MIC* and MIC-KEY* enteral feeding product catalogue 2020. 5. Triantafyllou K, Papanikolaou IS, Stasinou I, Polymeros D, Dimitriadis GD. Percutaneous endoscopic gastrostomy tube replacement unexpected serious events. Nutr Clin Pract. 2014; 29(1):142-5. 6. Collins K, Gaffney L, Tan J, Roberts S, Nyulasi I. Gastrostomy guidelines: a rapid review [2013; cited 2020 May 06]. Available from: <https://www.saxinstitute.org.au/wp-content/uploads/Gastrostomy-guidelines-a-rapid-review.pdf>. 7. Stroud M, Duncan H, Nightingale J. Guidelines for enteral feeding in adult hospital patients. Gut. 2003; 52(suppl 7):viii-2. 8. Best C [2019] Selection and management of commonly used enteral feeding tubes. Nursing Times [online]; 115: 3, 43-47. 9. Lohsiriwat V. Percutaneous endoscopic gastrostomy tube replacement: A simple procedure?. World J Gastrointest Endosc. 2013;5(1):14-18. 10. Product data sheet, MIC* and MIC-KEY* enteral feeding product catalogue 2019 non-ENFit®