

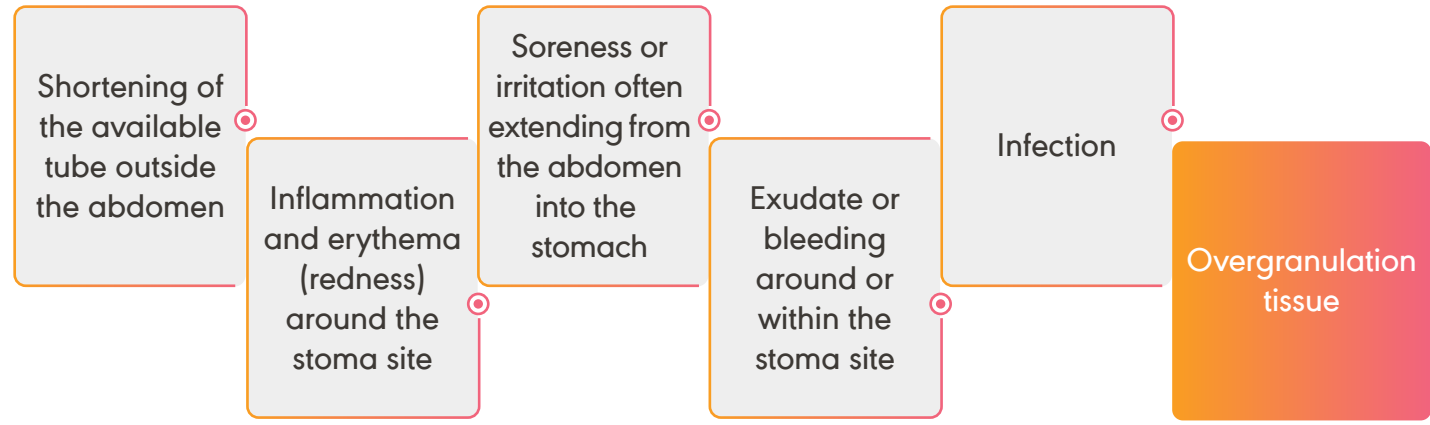
CHALLENGES OF GASTROSTOMY
TUBE-RELATED STOMA SITE
GRANULATION



Gastrostomy tube feeding is the preferred method of long-term feeding for individuals unable to maintain adequate oral intake due to dysphagia or other underlying medical conditions.¹

- Although the technical success rate of gastrostomy procedure is around 97%, each gastrostomy has specific requirements that need to be considered to prevent complications.^{2,3}

For instance, a loosely secured PEG may slide in and out of the stoma. This constant movement can result in complications such as—⁴



What is overgranulation?

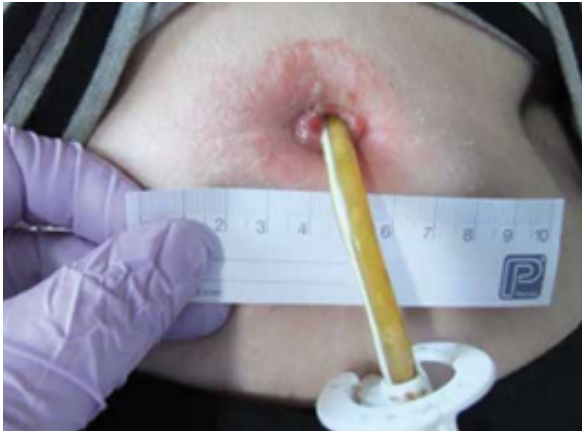
Granulation tissue is formed by a temporary latticework of vascularized connective tissue during the proliferative stage of healing and forms the basis for wound contraction and epithelialization.⁴ Overgranulation is a common problem at gastrostomy exit sites that occurs when the granulation tissue keeps developing after the wound defect has been filled.^{3,4}

- It is characterized by the appearance of light red or dark pink flesh that can be smooth, bumpy or granular, and forms beyond the surface of the stoma opening.⁵



Granulation tissue

(Adapted from <https://www.feedingtubeawareness.org/granulation-tissue/>).



Overgranulation tissue at the gastrostomy exit site

(Adapted from Warriner L, Spruce P. Br J Nurs. 2012; 21(Sup5):S14-24.)

Why is overgranulation tissue a complication?

Overgranulation tissue is mainly thought to be caused by friction from a poorly secured tube, and may lead to complications such as—³

- Tissue rubbing against the external fixator³
- Skin soreness and discomfort^{3,6}
- Skin breakdown in the gastrostomy exit site area due to fluid leakage³
- Unsightly, painful, and increased infection risk⁶
- Increased exudate production³
- Increased bleeding due to moist and highly vascularized surface^{6,7}

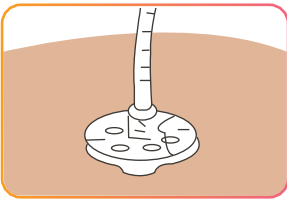
The presence of overgranulation tissue is not life-threatening;⁷ however, bleeding, exudate and odor may severely affect the patient's quality of life.³

DID YOU KNOW ?

Treatment options for overgranulation tissue include—³

- Surgical removal of the overgranulation tissue
- Use of silver nitrate to cauterize the overgranulation
- Topical use of low-dose steroids to reduce inflammatory response and production of overgranulation tissue, and antimicrobial agents to reduce bioburden in the tissue
- Use of foam dressings to reduce edema and apply pressure to flatten the overgranulation tissue
- Replacing the tube, if no other measures work

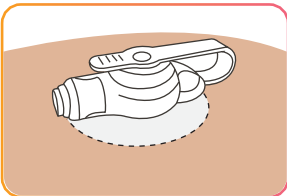
Ways to reduce skin irritation and minimize granulation tissue



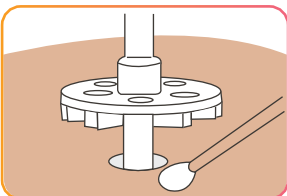
Correct positioning of the internal and external fixation device can minimize the risk and limit the need for medical intervention.^{4,5}

Ensure a distance of 2-5mm from the external flange to skin level⁵

Avoid continuous traction on the device.⁵

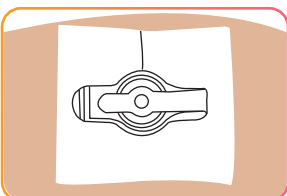


Use of skin-level gastrostomy may help reduce skin irritation, minimize granulation tissue and improve patients' quality of life.⁸



Clean insertion site at least once a day with water and ensure the area is well dried afterwards.⁶

Keep site free of moisture -avoid use of moisture retentive dressings.⁵



Use a thin dressing like gauze to absorb the leakage (moisture), and secure the flange against it to prevent further leakage.⁶

OUR SOLUTION

MIC-KEY* gastrostomy feeding tubes



- Used by more clinicians for patients than any other brand, backed by the largest body of clinical evidence⁹
- MIC-KEY* external dome has the proven, beveled design that allows air to circulate between the bumper and skin¹⁰
- High patient satisfaction with low adverse events such as granulation¹⁰
- Designed to minimize the potential for skin irritation and maximize stoma site care¹⁰

MIC* gastrostomy feeding tubes



- All MIC* PEG and balloon retained gastrostomy tubes feature a ventilated SECUR-LOK* external retention disc designed to allow air to circulate around the stoma and ensure the tube is held securely in place without causing friction or leakage¹¹

PEG, percutaneous endoscopic gastrostomy

References:

1. Elisa T, Adrian T, Yu-Ling H. Gastrostomy tube feeding and management in the community. Singapore Fam Physician 2020; 46(6): 27-33.
2. Cardiovascular and Interventional Radiological Society of Europe. Gastrostomy [Internet]. [cited 2021 Jul 27]. Available from: <https://www.cirse.org/patients/ir-procedures/gastrostomy/>.
3. Warriner L, Spruce P. Managing overgranulation tissue around gastrostomy sites. Br J Nurs. 2012; 21(Sup5):S14-24.
4. Best C. The correct positioning and role of an external fixation device on a PEG. Nursing times. 2004; 100(18):50-1.
5. A Clinician's Guide: Caring for people with gastrostomy tubes and devices. AGENCY FOR CLINICAL INNOVATION [ACI] guidelines. Available from: https://www.aci.health.nsw.gov.au/_data/assets/pdf_file/0017/251063/gastrostomy_guide-web.pdf.
6. Malhi H, Thompson R. PEG tubes: dealing with complications. Nurs Times. 2014 Nov 1;110(45):18-21.
7. Rahnamaei-Azar AA, Rahnamaiazar AA, Naghshizadian R, Kurtz A, Farkas DT. Percutaneous endoscopic gastrostomy: indications, technique, complications and management. World J Gastroenterol. 2014;20(24):7739-7751.
8. Blumenstein I, Shastri YM, Stein J. Gastroenteric tube feeding: techniques, problems and solutions. World J Gastroenterol. 2014;20(26):8505-8524.
9. Avanos. MIC-KEY* Feeding tube kits [Internet]. [cited 2021 Jul 27]. Available from: <https://avanosmedicaldevices.com/digestive-health/enteral-feeding/mic-key-feeding-tube-kits/>.
10. Product data sheet. HC205-01_DH Legacy_MIC-KEY_threefold_UK_LR. 11. Product data sheet. HCT13-04-UK_MIC&MIC-KEY_EnteralFeeding_ProductCatalogue_2020.pdf.

*Registered Trademark or Trademark of Avanos Medical, Inc., or its affiliates. © 2018 AVNS. All rights reserved. COPY-05620