Percutaneous Endoscopic Gastrostomy: Peristomal Leakage

Perkütan Endoskopik Gastrostomi: Peristomal sızıntı

Güldan Kahveci¹, Sema Basat²

¹University of Health Sciences Türkiye, Ümraniye Training and Research Hospital, Clinic of Nutritional Nursing, İstanbul, Türkiye ²University of Health Sciences Türkiye, Ümraniye Training and Research Hospital, Clinic of Internal Medicine, İstanbul, Türkiye

Cite this article as: Kahveci G, Basat S. Percutaneous endoscopic gastrostomy: peristomal leakage. J Acad Res Nurs. 2025;11(3):185-6

Dear Editor.

Peristomal leakage is a common complication around the insertion site of a percutaneous endoscopic gastrostomy (PEG) tube ⁽¹⁾. It is usually caused by leakage of stomach contents or nutritional product into the peristomal area, which can lead to skin irritation, infection, or hypergranulation. A small peristomal leak may occur in the week following placement, but leakage of stomach contents can lead to peristomal infection and even tube loss ^(1,2)

Causes of Peristomal Leakage

Risk factors for peristomal leakage include skin infection, increased gastric acid secretion, gastroparesis, distension, constipation, lateral bending of the tube, increased tension between the internal and external bumpers, Buried Bumper Syndrome and hypergranulation tissue. Additionally, factors such as diabetes, immunosuppression, and malnutrition may impede wound healing (1-3).

Management of Peristomal Leakage

The skin around the PEG tube should be cleaned regularly and protected with barrier creams containing zinc oxide ^(4,5). In addition, foam dressings can be used instead of gauze to reduce local skin irritation (foam draws drainage away from the skin, while gauze prevents skin maceration). Unnecessary tube movement or excessive pressure should be avoided. Proton pump inhibitors

(PPI) can be used to reduce leakage by minimizing gastric acid secretion. It maybe useful to initiate prokinetic agents to manage gastric residual volume and switching from bolus feeding to intermittent or continuous infusion with pump. Hypergranulation tissue can be treated with silver nitrate or steroid creams. If all the above-mentioned measures fail, the PEG tube should be removed and a gastrostomy tube should be placed in a new location (1,5). In one of our cases, NÖ was a 56-year-old mobile female patient with tracheostomy, diagnosed with stage 4 laryngeal cancer who is receiving chemotherapy and radiotherapy. The patient's PEG tube started leaking 1 week after the PEG tube was placed (Figure 1). Her dressing is wetted 3 times a day. The patient's anamnesis revealed no instances of constipation, a factor known to increase intra-abdominal pressure. However, the presence of cough was noted and also patient fed bolus. After physician's order the patient was started on PPI (pantoprazole-once a day) and prokinetic agent (domperidone-three times a day). It was recommended that the dressings be changed as they got wet and applied with a barrier cream containing zinc oxide. The patient's PEG insertion site image at the end of the first and second weeks after treatments is as shown in Figures 2,3.

Informing caregivers about possible complications and controls in PEG care education will reduce complications and contribute positively to the long-term use of the PEG tube. However, the importance of close follow-up of the patient in the presence of complications is also seen in the case presented here.

ORCID IDs: GK. 0000-0002-6864-5310; SB. 0000-0002-6479-1644



Corresponding Author: Güldan Kahveci, E-mail: nurse.guldan@gmail.com Received Date: 24.04.2025 Accepted Date: 21.08.2025
Publication Date: 02.12.2025







Figure 1. Skin Ulcer with Persitomal Leakage



Figure 2. One Week After Treament



Figure 3. Two Week After Treatment

Footnotes

Authorship Contributions

Concept: GK, SB; Design: GK, SB; Analysis or Interpretation: GK, SB; Literature Search: GK, SB; Writing: GK, SB.

Conflict of Interest: No conflicts of interest were declared by the authors. **Financial Disclosure:** This study received no financial support.

REFERENCES

- Bischoff SC, Austin P, Boeykens K, Chourdakis M, Cuerda C, Jonkers-Schuitema C, et al. ESPEN practical guideline: home enteral nutrition. Clin Nutr. 2022; 41(2): 468-88. [Crossref]
- Sobotka L, editor. Klinik nütrisyon temelleri. Demirağ K, çeviri editörü. Ankara: Bayt Yayın; 2021. p. 289-306. [Crossref]
- Kahveci G, Dağcı S, Atalay R. A different perspective of hypergranulation tissue care in percutaneous endoscopic gastrostomy: a case report and review of the literature. Endoscopy Gastrointestinal. 2019; 27(2): 65-7. [Crossref]
- Kahveci G, Özşenel EB, Basat S. Effect of video-based education on percutaneous endoscopic gastrostomy tube use duration: a case report. Clin Sci Nutr. 2024; 6(1): 50-3. [Crossref]
- Kahveci G, Atalay R, Çalışkan Z, Dağcı S, Özsenel EB, Altuntaş Ç, et al. Use of temporary foley catheter instead of percutaneous endoscopic gastrostomy tube. J Acad Res Nurs. 2023; 9(3): 234-7. [Crossref]