Published in final edited form as:

Clin Gastroenterol Hepatol. 2013 February ; 11(2): A25. doi:10.1016/j.cgh.2012.08.008.

An Uncommon Complication of Percutaneous Endoscopic Gastrostomy Tubes

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Case

An 84-year-old woman presented with an acute non-ST elevation myocardial infarction. She underwent bypass surgery for severe coronary artery disease and started daily aspirin. Post-procedure, a percutaneous endoscopic gastrostomy (PEG) tube was placed because of persistent oropharyngeal dysphagia. Ten days after PEG placement, the patient developed melena with a hemoglobin drop from 9.7 to 7.4 g/dL, and the gastroenterology service was consulted. After resuscitation with two units of blood, an EGD was performed. Along the anterior wall of the gastric body, the internal bumper of the PEG tube was found to be embedded into an ulcer leading to the gastrocuteaneous tract (Figure 1). It appeared that the bumper had eroded deep into the gastric wall due to excessive pressure associated with an external bumper that was secured too tight against the skin with a surgical suture. This suture was cut and the external bumper was loosened. After placing a guidewire through the PEG tube and clamping the tube onto the guidewire, we applied gentle external pressure and advanced the internal PEG bumper into the gastric lumen with the aim of preventing further pressure necrosis and erosion. Post-procedure x-ray showed no evidence of free air to suggest perforation. The patient completed 72 hours of continuous pantoprazole infusion, her melena resolved, her hemoglobin stabilized at 9.4g/dL, and enteral nutrition via PEG was slowly restarted. She recovered well and was transferred to a skilled nursing facility for physical therapy rehabilitation.

With a reported prevalence of 0.3-2.4%, the “buried bumper syndrome” is a rare complication of PEG tubes characterized by migration of the internal bumper into the gastric or abdominal wall.¹ First described in 1988, with the term “buried bumper” subsequently introduced in 1990, this complication can manifest with pain and infection at the stoma, leakage around the PEG, or difficulty administering feedings.¹⁻³ While generally considered a late complication from chronic bumper pressure leading to erosion and migration, several case series illustrate that earlier occurrences of this complication are not uncommon.^{1,4,5} Timely diagnosis and management are important to prevent development of more serious sequelae such as peritonitis, abscesses, and perforation. Deeply migrated bumpers can be managed with a variety of advanced endoscopic techniques, while in less severe cases, the PEG tube may be removed with external traction. We chose not to attempt external PEG

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No conflicts of interest exist for all authors

tube removal in our patient because of the possibility of creating an open communication to the peritoneum. Our case highlights the importance of proper adjustment of the external PEG tube bumper in order to avoid pressure necrosis and ulceration of the gastric wall by the internal bumper.

Acknowledgments

Robert Wong is supported by National Institutes of Health (NIH) T32DK7056-37

Both Robert Wong and Uri Ladabaum participated fully in the conception and design; analysis and interpretation of the data; drafting of the article; critical revision of the article for important intellectual content; final approval of the article.

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Figure 1.