

Managing patients with a PEG

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Enteral feeding via a percutaneous endoscopic gastrostomy (PEG) can improve a patient's gross nutritional deficiencies and maintain his or her quality of life. Here, these authors provide an outline of gastrostomy tube feeding.

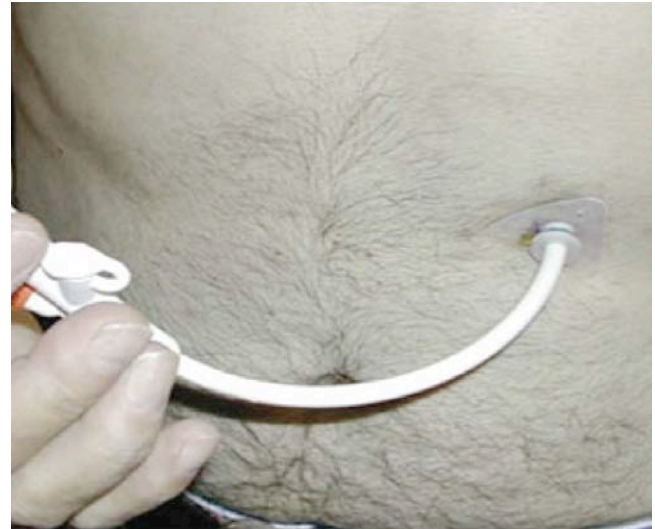


Figure. Gastrostomy tube feeding.

Remember

- Malnutrition contributes to higher mortality and risks of infection. Enteral feeding is a safe and effective way to obtain nutrition in a functioning gut when a patient cannot eat or drink sufficiently for survival.
- Patients to be considered for enteral feeding via percutaneous endoscopic gastrostomy (PEG) include:
 - those with swallowing difficulties due to progressive neurological disorders such as motor neurone disease

- those who cannot safely swallow because of neurological injury such as cerebrovascular injury or trauma, or oesophageal obstruction due to inoperable malignancy
- those unable to maintain nutrition due to chronic illness such as cystic fibrosis.

Assessment

- Prior to PEG placement, patients should be assessed by a dietitian, an enteral feeding nurse and, if swallowing difficulties are suspected, a speech pathologist. This ensures a nutrition plan tailored to the patient's needs and a patient well informed about all aspects of his or her feeding regimen.
- If problems occur with gastrostomy tube feeding, always consider non-feed related problems. If feed related nausea or vomiting occurs, this may be due to an inappropriate feeding rate or patient position during feed, formula contamination, air in the stomach or faecal impaction. Feed related diarrhoea may be due to too rapid administration, hyperosmolar or cold feeds, medications, rapid gastrointestinal transit or bacterial contamination. If the feed rate is

changed, a dietitian should be contacted to ensure that adequate nutrition is maintained.

Management

- After insertion of the PEG, patients may shower as usual (ensuring that the skin under the retention disc is dried carefully) but not bathe or swim until the stoma track is formed (which takes six to eight weeks). Patients with a PEG should never use a spa.
- The skin disc measurement against the tube numbering should be recorded and checked to ensure the disc does not migrate, and the tube should be rotated and the site checked daily. The PEG feeding tube is held in place by internal and external retention devices usually a balloon or bumper on the gastric side and a disc at the skin. The disc should allow some room for the PEG to move; too tight an apposition and skin necrosis and buried bumper syndrome will occur, too loose and the PEG balloon may migrate further into the stomach and cause gastric outflow obstruction. Both these complications can be prevented by intermittently checking the skin disc measurement

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against the tube numbering and rotating the tube.

- On admission to a nursing home, patients with a PEG should be reviewed by a dietitian to monitor nutritional status and tolerance to the regimen. Review should be repeated every six to 12 months.
- Feeds should be administered with the patient either sitting in a chair, propped up in bed or on a couch at a 30° angle, not laying flat. They may be delivered by gravity (from a container suspended from an IV pole), a mechanical pump or bolus using a syringe.
- Feeding should be stopped if the patient experiences coughing, choking or breathing difficulties as this may indicate aspiration.
- After feeds (and medications), the tube should be flushed with warm water without excessive force. If blockage of the tube occurs, use pancreatic enzymes.
- If leakage of gastric contents occurs around the PEG tube, exclude infection, side torsion on the PEG, loss of balloon volume and buried bumper syndrome.
- If hypergranulation occurs, consider inflammation, moisture, excessive PEG tube movement, excoriation due to excessive pressure between PEG flanges, gastric content leakage, poor hygiene, diabetes and poor wound healing due to immunosuppression.
- PEGs usually last up to 12 months and can be replaced by a gastrostomy (a balloon device) or a low profile gastrostomy device of the same diameter. Low profile gastrostomy devices, which protrude just above

the skin and to which a tube is attached for feeding, are usually only placed in mature gastrostomy tracts. PEGs should be changed if the tube begins to perish, split, flatten or bubble due to infection, or blocks irreversibly.

- If a PEG/gastrostomy falls out it should be replaced within one to two hours, before the stoma tract starts to close. If necessary, a urinary catheter of similar size can be used until a replacement is found. If the PEG is new and the tract has not formed, the patient should be referred to a gastroenterologist. **MT**

DECLARATION OF INTEREST: None.

The administering of medicines via PEGs will be discussed in a future article in the Digestive Health Foundation series in *Medicine Today*.