Delivering nutrition, fluids & medication via a PEG

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Aims of this session?

• To give an explanation of the theory and practice of a Percutaneous Endoscopic Gastrostomy (PEG)

• Consider ethical issues

• To demonstrate the use and care of a PEG tube.
Reasons for a PEG tube

• **Head and neck cancers**: PEG is the safest method for long term feeding support. It is particularly useful following extensive surgery or when combined with chemotherapy, radiotherapy or both.

• **Malignant bowel obstruction**

• **Brain tumours**

• **Neurological conditions including**
  • Multiple Sclerosis
  • Motor Neurone Disease
  • Multiple system degeneration

• **Head injury patients**
What is a PEG used for?

- **Nutrition**: by supplement feeds or continuous pump.

- **Fluids**: to hydrate or flush the peg tube with 50-100mls before and after feed or medication. Extra fluid may be needed in hot weather, or if the patient is unwell with a fever or diarrhoea and vomiting.

- **Medication**: that can no longer be taken orally can be given in liquid form or crushed and administered via the PEG.
Percutaneous Endoscopic Gastrostomy (PEG)

- Conscious sedation given
- Endoscope is passed and stomach is inflated
- Transillumination with endoscope to locate the puncture site
- Local anesthetic given at puncture site
- Incision is made from the outside
- Guide wire is then inserted through the incision.
- Guide wire is grabbed from within the stomach using the biopsy forceps, and pulled up the oesophagus out of the mouth
- PEG feeding tube is passed over the guide wire through the mouth, oesophagus, into the stomach and pulled through the original incision made through the stomach and abdominal wall.
- A internal bumper holds the tube in place, and there is an external fixation device to maintain position for the first 7-10 days whilst the tract forms
Internal retention disc, to keep PEG in place

External fixation plate keeping PEG in position

Stomach

Abdomen
Skin care around PEG site

- **After insertion of PEG tube:** A dressing covers the site and is removed once the skin around the tube has healed (you may not be involved at this stage).

**Routine skin care:**
- Clean the skin around the tube once a day with soap and water. Check for redness, swelling or heat around the area where the tube goes into the abdomen. Check for fluid/discharge from the site and report any concerns to a registered nurse.
- Keep the skin around the PEG tube dry.
- Turn the tube daily, gently turning to decrease pressure on the skin under the bumper to prevent scar tissue.
- If the skin becomes infected a barrier or antibiotic (germ-killing) cream may be needed on prescription.
Care of the PEG tube

- **Flush**: flush the PEG tube before and after each use, to help prevent clogging with feed or medication. Use at least 50mls of tap water (extra if patient unwell), boiled, or sterile water (when first inserted) for flushing the tube. If the tube will not flush/is blocked, report to a registered nurse.

- **Check the PEG tube daily**
  - **Tube length**: check length of tube and report if any changes.
  - **Bumper tightness**: check bumper (piece around the tube next to skin) should be snug.

- **Hub of the PEG tube**
  - **Connecting and disconnecting**: when connecting and disconnecting the PEG tube from a syringe or feed tubing, do not let the end of the tube touch anything. If it does, use warm water to clean off the end of the tube and dry thoroughly with a paper towel.

  - **Daily care**: clean the hub (tube opening) of the PEG tube daily with warm water. This is where the feeding equipment or syringe is attached to the PEG tube.
Types of Feed

- A dietician will decide the method of how the feed/formula should be given through a PEG tube. Calculating how many calories they need depending on whether they are still eating or not. Some neurological patients can continue to eat and enjoy food despite having a PEG.

- **Most commonly used:**
  - **Feed by syringe:** draw up feed/formula in an entral syringe, connect to the end of the PEG tube hub, unclamp the clip and gently push the feed down the tube with the syringe plunger.

- **Feeding pump:** an electric pump connected to the end of the PEG tube which controls/regulates the flow of feed over a number of hours. The dietician will instruct the patient and carer how to set up and use the pump.
Ethical issues to consider

• Does patient have capacity to make decisions?

• Does the patient have an advance directive?

• If a patient has a PEG, do they have a plan for End of Life Care?

• Non-maleficence – to do no harm
Giving fluids by syringe

1. Use the plunger in the syringe to **DRAW UP** the fluid or feed.

2. Place the tip of the syringe into the peg tube, unclamp the clip on the tube and **gently INSERT** the fluid.

**CAUTION!** NEVER use excessive force to flush the feeding tube
Another way to give

1. **REMOVE** the plunger from the barrel of the syringe

Ensure the patient is sitting at a 45 degree angle before the PEG is used, do not lay flat after use
2. **INSERT** the tip of the syringe into the feeding tube
3. **POUR** the prescribed amount of the fluid/formula into the syringe. Unclamp the clip and let it flow slowly until the syringe completed (clamping the clip to refill the syringe).
• This presentation does not mean you are competent to give fluids or feed via a PEG tube. In your own place of work you should have PEG competencies for you to work through with a registered nurse to achieve.

• Any questions?