

Living with your PEG

*(Percutaneous Endoscopic
Gastrostomy)*

www.tdhb.org.nz



OTHER INFORMATION:

GP:
Specialist:
Dietitian:
Speech Therapist:
District Nursing Service:
Community Pharmacy:
Special Authority No.:
Other:

.....
.....

Type of PEG:

Size: Length:

Code: Make:

Balloon volume: ml

Supplier

Record date of change on appointments pages 14 and 15.

Spare PEG at patient's house: Yes/No

Foley Catheter Yes/No

Equipment supplies (delete items that are not required)

- 4 x 50 cc catheter tip syringes per month
- 1 x 10 ml leur lock syringe per month or small for children
- 30 x Flocare giving sets per month
- Other

**Living With a PEG
Patient Information Brochure**

Before your procedure you will receive an information booklet about what to expect while you are in hospital.

This booklet provides an outline about how to take care of yourself and your PEG, and includes what you can expect to happen after you leave hospital and who to contact if you have any concerns.

A gastrostomy tube or PEG - Percutaneous Endoscopic Gastrostomy is where a silicone tube is placed into the stomach through the wall of the abdomen. Gastrostomies are inserted to deliver nourishment and liquids into the stomach. There are different types of tubes available, your Doctor or Nurse will recommend the best type for you.

While you are in hospital the Dietitian and nursing staff will teach you and your family/caregiver how to manage your PEG and PEG feeds. You will also be given the manufacturers' guide about the use and care of your tube.

At Taranaki DHB the initial placement tube is usually a Wilson-Cook, PEG 24. It is important to monitor for signs of wear, eg tube corrugations which indicate replacement is necessary. Sometime 2 to 15 months after the PEG insertion the initial PEG tube will be replaced at Endoscopy. Your District Nurse, Dietitian or GP can arrange this for you.



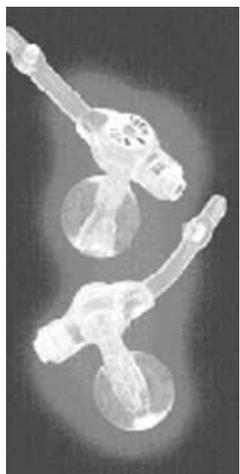
Replacement Tubes

After the PEG 24 has been replaced, tubes are usually replaced every 5-8 months. Ongoing tube changes can be performed in the setting appropriate for you, eg home, residential facility, endoscopy clinic or District Nurse rooms. Tubes can be replaced by trained staff, patient or family/caregiver. Analgesia or sedation is not usually required, if so, an Endoscopy appointment will be arranged for you.

At Taranaki DHB the tubes usually used to replace the initial tube and for ongoing replacements are:

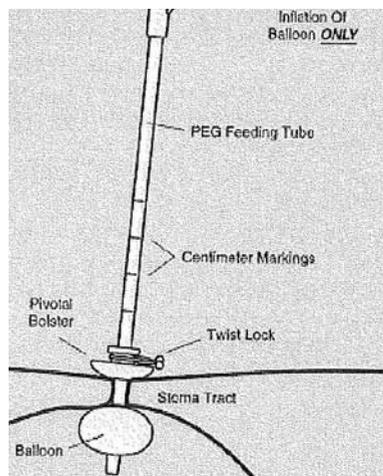
MIC-KEY 20 Fr low profile device [LPD], which lies flat against the skin. LPDs are often desired by a more active patient.

Where an LPD is not required or is unsuitable, eg for caregiver access, patient weight, limited dexterity, a Balloon Replacement Tube [BRT] with a longer outlet tube may be used to replace the initial tube. These are usually a Cook BRT.



MIC-KEY– Low Profile

Please keep packaging, instruction booklet and other components of the set for connection to feeding devices and future ordering. The balloon volume should be checked every 7-10 days.



Balloon Replacement Tube

Ideally a replacement tube should be held on site/at home and patient/family or caregivers aware of how to replace these if necessary. If the tube falls out please see troubleshooting advice at the back of this booklet.

SKIN CARE & TUBE CARE

Wash your hands before you touch your tube!



Daily skin care is essential. For the first 48 hrs, the site is cleansed with saline on cotton tips once or twice a day. After the first 48 hours, you may shower or bath as usual, wash around the tube with soap and water, rinse and dry the skin thoroughly, do not use talcum powder and only use creams that have been prescribed for use around the site.

Check the tube site daily for signs of redness or irritation, soreness or swelling, discharge or leakage. Dressings are not required; if there is discharge, apply a light gauze only over the top of the disc not underneath it. Look for signs of tube wear and tear (corrugation effect). Contact your District Nurse or Doctor if you have concerns.

Rotate the PEG tube 360° a full circle once each day. (PEG only not J tubes) This prevents irritation, pressure on the skin and stops the bumper inside sticking to the stomach wall.

The skin disc should be sitting so there is 1-3 mm between it and the skin. (i.e sufficient room for a \$2 coin). The disc may need adjustment if your weight changes, your District Nurse can assist you. If the tube is too loose there may be leakage of stomach

fluid. Check the position of skin disc on the PEG tube and write in this booklet (page 16). This is not applicable if you have a Low Profile Device.

Avoid tension/pulling on the tube, pressure from tension can cause the skin to breakdown.

Remember to continue mouth cares as usual.

EXERCISE



No lifting or rigorous activity is recommended for the first 2 weeks after PEG insertion. This allows your wound to heal adequately then normal exercise, including swimming, can resume.

YOUR FEEDING PLAN

Your dietitian will develop a feeding plan that best suits your needs and lifestyle. A copy will be held on your file and you will be given a copy to have at home. Your Dietitian will review this with you regularly.

The most common methods of PEG feeding with formula are:

- Continuous feeding where feeds are administered over 20-24 hours by pump
- Intermittent feeding where feeds are delivered over a limited portion of the day. Ranging from 3 – 20 hours by pump
- Bolus feeding where feeds are given via a 50-60 ml syringe or by drip set, several times per day over 5-10 minutes.
- Combination e.g. continuous feeding overnight and bolus feeding during the day.
- Your dietitian will advise you about taking food or fluids orally

Support is provided by the District Nurses when you return home and Dietitian is available to discuss your feeding plan. Your Doctor will arrange your ongoing feed prescriptions. If you live in a Residential facility, Nursing Staff there will be able to assist you.

Preparing for feeding

1. Wash your hands before you commence feeding.
2. Take a seated position if in bed or the head end of the bed should be elevated to 30- 45 °, and remain so for one hour after feeding.
3. Check that the tube is in place. Check the measure on the tube, if the tube appears longer or shorter than the previous length it might have moved. If there is doubt, do not feed, contact your District Nurse.
4. Check that the tube is not blocked by flushing with water before giving each feed and before giving any medication. The feeding plan will tell you how much water to use.
5. Shake the formula well before using.

Continuous Feeding by Pump:

Equipment required:

- Clean surface/bench
- Formula (ready to hang bottles or cans, plus plastic FloCare containers)
- 50ml syringe and water for flushes
- Pump and pole
- Giving sets

Procedure

- * Operate the pump as per the manufacturer's instructions
- Flush the tube with 20-30mls of warm tap water using a 30-60ml syringe
- Attach feeding set to bottle of formula. Prime formula through feeding set according to manufacturers instructions.
- Attach feeding set to gastrostomy tube. Set the rate as recommended by the Dietitian and turn pump to run to commence feeding.
- Avoid hanging in direct sunlight
- Note the start time
- When formula has finished, flush tube with 20-30ml of warm tap water or more if extra fluid is required.

Intermittent Bolus:

Equipment required:

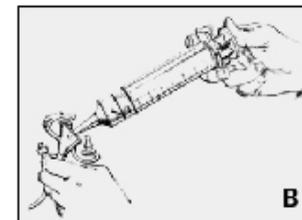
- A clean surface for feeds and equipment (e.g. table or bench).
- Feed / Formula.
- Measuring jug for feed (optional).
- 60ml syringe.
- Jug with fresh clean tap water, at room temperature (not hot or very cold). Run the tap for a few minutes first. Use boiled cooled water if have unsafe/potentially contaminated water supply.

Gravity bolus feeding

1. Remove plunger from syringe and put aside.
2. Place tip of syringe firmly into the feeding tube – hold upright.
3. Using the syringe as a funnel, pour in the prescribed volume of water to flush the tube.



4. Open clamp/port on gastrostomy tube. The water should flow through by gravity. Close clamp/port when water reaches lower end of the syringe barrel, to prevent air going down the tube.
5. Measure out required feed
6. Pour feed into syringe either from original container or jug. Open clamp/port again, but not fully, as generally the feed is best tolerated if given slowly over 10 – 15 minutes. NB: The flow of water/feed is dependent on the height the syringe is held, ie higher = faster flow.
7. Flush again with prescribed volume of water.
8. Remove syringe and close tube



Using the plunger in the syringe

1. Draw prescribed volume of water for flushing into the syringe, and place tip of syringe firmly into the feeding tube.
2. Open clamp/port
3. Very gently push down on the plunger and 'inject' the water into the tube. Close clamp/port. Remove syringe.
4. Draw up syringe full of feed, fit in to feeding tube.
5. Open clamp/port. With a slow push, 'inject' the feed into the feeding tube. Close clamp/port. Continue this routine until the prescribed volume of feed has been given.
6. Flush with water, as per feeding regimen.
7. Close clamp/port, remove syringe, and close feeding tube.

Combination:

Equipment required as above.

NB When giving food by gravity tubing or pump method, always prime tubing prior to commencing feed

Flushing

- For continuous feeding - flush PEG every 4 hours, it is not essential to flush overnight.
- Flush 4 hourly, particularly important for jejunal tubes or thick or sticky formulas.
- Flush with 30-50 mls of water unless otherwise stated
- Flush before and after medications.
- Flush before and after bolus feeds.
- Flush anytime tube is disconnected such as for showers, physio or other procedures.

Formula and tubing

The pumps, tubing and containers usually used in Taranaki DHB are the FloCare range. Feeding pumps are provided by the dietitian. An initial (one week) supply of formula, bottles and giving sets is provided by the Dietitians. District Nurses or Residential care staff will arrange ongoing supplies and replacement tubes after discharge. Formula supplies are collected from the patient's community pharmacy. A special authority number is required for funding. Any problems or when supplies are required can be requested from the dietitians via the hospital operator, and the kitchen tray line staff after hours.

- Ensure formula is at room temperature
- Use careful handling techniques to prevent contamination
- Ready to hang bottles hang for 24 hours, note time and date.

- Decanted feeds should only hang for 12 hours, note time, date and feed type. Do not top up.
- Giving sets should be changed every 24 hours
- In hospital change syringe every 24 hours, at home at least fortnightly. In-between uses wash with hot soapy water and air dry thoroughly, or if dishwasher is available wash in dishwasher and dry thoroughly.

It is important that you:

- Follow the Feeding Plan as prescribed and contact the Dietitian if any concerns.
- Contact your District Nurse for advice and equipment supplies
- Discuss medication issues with your General Practitioner (GP) and Pharmacist
- Have spare tube/catheter on hand for insertion within 2- 4 hrs if the tube is accidentally dislodged
- Follow manufacturers instructions for care of your tube and use of feeding pumps
- Monitor your bowel function and urinary output and report any concerns to your Dietitian, GP or District Nurse.
- Also monitor your body weight and notify the Dietitian, GP or District Nurse if there is any significant weight changes.

Medications

A pharmacist will advise you how to take your medications and Nursing staff can show you the technique to give via the PEG if required.

- Do not mix medications with formula
- Give medications separately with 5 mls of water in between
- Flush before and after giving medications via the PEG

TROUBLESHOOTING

PROBLEM	LIKELY CAUSE	MANAGEMENT
<p>Accidental Removal: Tube comes out.</p> <p>or</p> <p>Displacement of Tube: Pain, nausea, vomiting, unexpected decrease or increase in the tube length as measured by the centimetre markings on the tube.</p>	<p>Excessive traction on the tube.</p> <p>Removal by patient.</p> <p>Misplacement of tube.</p> <p>Balloon failure.</p> <p>Improperly positioned, external disc, improperly secured tube.</p>	<p>Do not panic!</p> <p>If it is the first PEG tube – insert the Foley catheter as a temporary replacement to keep the tract open. Do not inflate balloon. Contact your Nurse or healthcare provider as soon as possible.</p> <p>For balloon replacement tubes – if the tube is not completely dislodged, withdraw fluid from the balloon and reposition. If the tube is completely out, it may be reinserted if the balloon is intact, or a replacement tube can be inserted if you have one. If not contact your Nurse or healthcare provider.</p> <p>Replace the tube as soon as possible. The tract will begin to close over in 1-2 hours and will seal in approximately 24 hours.</p>
<p>Blocked or Clogged Tube The tube no longer functions properly, feeds may be slow or impossible to administer</p>	<p>Inadequate flushing,</p> <p>Medications not crushed properly, thick medications</p> <p>thick formulas, formula contamination.</p> <p>Formula left in tubing curdles.</p> <p>Reflux of stomach contents up the tube</p>	<p>Prevent by regular flushing.</p> <p>Make sure tube is not kinked or clamped.</p> <p>Flush with 50ml warm tap water, use catheter tip syringe.</p> <p>Liquidised foods are too thick and not recommended for PEG tubes.</p> <p>Use 50ml syringe to install diet soda (non cola), or carbonated water into tube and wait 15 minutes, this may help to dissolve the blockage.</p> <p>If clog is visible gently milk the tube between your fingers.</p> <p>If all else fails, contact your Nurse to replace the tube.</p>

TROUBLESHOOTING

PROBLEM	LIKELY CAUSE	MANAGEMENT
<p>Leaking around the Tube Expect to see a small amount of clear drainage in the first few weeks following insertion. However, if there is a significant amount of fluid or formula leaking around the tube, the skin around the tube will break down</p>	<p>Tract too large for size of tube. Tract has become enlarged or the flange has migrated into the stomach. High intra-abdominal pressure caused by coughing or constipation, may force fluid out through the stoma. Improper patient positioning during feeds, ensure patient sitting up at least 30°. Weight loss can cause the tube to become too loose. Feed volume or rate is too high.</p>	<p>Ensure 1-3 mm space between skin and skin disc. Gentle traction will bring gastric and abdominal walls together. Record the type and amount of ooze and any presence of swelling. Excess ooze/discharge and/or oedema could indicate an infection. Avoid dressings. A dry light dressing (gauze) may be placed over the external skin disc and changed regularly. Correct patient positioning. If a balloon is used, ensure that it is inflated by gently pulling on the tube and checking for resistance. Check balloon volume. Contact the Dietitian if you suspect a problem with the feed volume or rate. Contact your Nurse who may wish to: review the size of the PEG tube, take a swab of site for culture, check the balloon volume and / or check the amount of gastric fluid/formula left in the stomach 4 hours after feeding (residual). This should be less than 200mls.</p>
<p>Skin Infection Pain, redness, inflammation, rash, bleeding around the tube site</p>	<p>Excessive moisture at site. Excessive pressure between the skin disc and internal bumper.</p>	<p>Correct any source of moisture or pressure. Ensure 1-3 mm space between skin and skin disc. Keep this area clean, dry. Avoid dressings. Contact your Nurse, who may take a swab area for culture. Treat infection as ordered by Doctor.</p>
<p>Bleeding</p>	<p>This may occur if the tube is moved too much. Infection or pressure.</p>	<p>Ensure 1-3 mm space between skin and skin disc. Ensure the anchoring device is secure to prevent any unnecessary movement Correct any source of moisture or pressure.</p>

TROUBLESHOOTING

PROBLEM	LIKELY CAUSE	MANAGEMENT
<p>Pressure Redress or ulceration of tissue at tube feeding site or internally</p>	<p>Compression between skin disc and internal bumper causing damage to gastric or abdominal wall characterised by bleeding, leakage or tube obstruction</p>	<p>Always ensure there is a 1-3mm distance between the skin disc and the skin.</p>
<p>Over granulation Tissue becomes 'proud' around the site. Site may be constantly wet, bleeds easily on contact and is prone to infection.</p>	<p>Cause unknown. May be linked to excessive moisture, infection, reaction to tube.</p>	<p>Correct any source of moisture or pressure. Ensure 1-3 mm space between skin and skin disc. Keep this area clean, dry. Avoid dressings. Contact your Nurse, who may take a swab area for culture. Contact your Nurse or Doctor, silver nitrate may be used or a cream such as a topical cortico steroid or antifungal may be prescribed.</p>
<p>Diarrhoea</p>	<p>Medication eg, antibiotics, chemotherapy, laxatives. Radiotherapy. Bacterial contamination of the formula, gut infection. Other illness. Lactose intolerance. Incorrect administration of the formula eg TOO MUCH, TOO FAST. Constipation.</p>	<p>Slow down the feed and contact the Dietitian. Change equipment more frequently. Notify doctor if symptoms persist.</p>

TROUBLESHOOTING

PROBLEM	LIKELY CAUSE	MANAGEMENT
<p>Constipation</p>	<p>Bowel actions may be less frequent if patient is on a low residue formula, maybe twice weekly. Changes in diet. Lack of activity. Reduced fluid intake. Insufficient fibre in feeding. Medications.</p>	<p>Increase water intake via the tube. Contact the Dietitian for possible change of formula. Encourage ambulation. Laxatives: Senokot, Lactulose or fruit juices e.g prune juice. If continues contact your Doctor.</p>
<p>Stomach Discomfort Eg nausea, vomiting, bloating or gastric reflux</p>	<p>Intolerance to formula. Feeding rate too fast. Formula too cold. Incorrect body positioning during feeding. Constipation or Diarrhoea.</p>	<p>Slow down feeding rate, don't rush. If you feel full, are nauseated or vomiting, wait 1-2 hours and then resume feeding slowly. Contact Dietitian for new feeding regime. Small, frequent feeds at room temperature. Ensure correct position. Decompress the tube allowing air or residual feed to escape.</p>

References:

Published by: Case Management Unit

Responsibility: District Nursing, Taranaki District Health Board

Date Published: November 2010

Review by Date: November 2012

Version: 1