NHS
University Hospitals of Derby and Burton
NHS Foundation Trust

Management of Gastrostomy feeding tubes -full clinical guideline (adults)

Reference No:CG-CLIN/4450/24

Purpose and outcomes

This guideline outlines the process for the referral, and management of patients receiving nutrition via a gastrostomy feeding tube within UHDB, it applies to all clinical staff involved in the management of patients who are having or require artificial nutrition via a gastrostomy tube.

Gastrostomy tubes available at UHDB

Percutaneous Endoscopic Gastrostomy (PEG)

A feeding tube inserted into the stomach during an endoscopic procedure, it is secured in the stomach with an internal fixation disc and held in position with an external fixator on the abdomen. PEGs are not routinely changed as a repeat endoscopic procedure is required. However, if the tube deteriorates or becomes damaged, it will be replaced.

Radiologically Inserted Gastrostomy (RIG)

A feeding tube inserted into the stomach in interventional radiology, it is secured in the stomach with a water filled balloon and held in position with a fixation disc on the abdomen. Tubes are replaced at the bedside every 6 months (unless indicated sooner)

Referral for assessment for a gastrostomy tube

RDH -refer to the nutrition nurse specialists for PEG or RIG via Extramed.

QHB -refer via V6 for PEG insertion.

-RIG insertion, refer to Radiology Inserted Gastrostomy guideline

Assessment for gastrostomy tube

Assessment for insertion of a gastrostomy tube will be undertaken considering the following:

- The patient has been shown to tolerate nasogastric tube feeding for 2-4 weeks, or a patient is unable to tolerate a nasogastric tube despite the tube being well secured i.e., with nasal retention device.
- After a neurological event such as stroke, insertion of a gastrostomy tube should be delayed until the prognosis/quality of life of the patient can be better predicted.
- The patient is likely to need long term enteral tube feeding (4 weeks or more)
- The patient has aspirated or has an increased risk of aspiration.
- The patient is to undergo surgery/treatment that may make eating and drinking unsafe.
- The Trust artificial nutrition and hydration difficulties and dilemmas- legal & ethical guidelines for adult patients. Details for: Artificial Nutrition - Dilemmas - Clinical Guideline › Trust Policies Procedures & Guidelines catalog (koha-ptfs.co.uk)
- Therapeutic endoscopy should be avoided, if at all possible, in patients at risk of nv-CJD. Some patients with non-vascular dementia will have new variant CJD (nvCJD) It is hard to be certain which of these patients are affected. Patients with non-vascular dementia should have a RIG inserted. This has the advantage of using only disposable equipment so avoiding the risk of endoscope contamination with nv-CJD.

PEG

Pre procedure requirements

- Patient/Consultant consent to be obtained (for further guidance about capacity to consent please refer to the Trust policy for Consent- including mental capacity act)
- Nil by mouth and nasogastric tube for 6 hours pre procedure
- Peripheral intravenous cannula in situ.
- Check allergies to antibiotics.
- Clotting within normal limits (< 1.3)
- Anticoagulants and antiplatelet drugs to be managed in accordance with hospital policy.
- Oral hygiene performed and dentures removed.
- Ensure that an enteral feed plan is prescribed.
- Ensure patient is wearing a hospital gown.
- Antibiotics to be given in Endoscopy as protocol.

Nursing management of PEG tubes

First 24 hours following insertion.

Check blood pressure, pulse, respirations, and temperature half hourly for 2 hours and then hourly until feed commences.
Check PEG site for any bleeding, leakage, or signs of displacement.
Document the tube details, including fixation device position on nursing care plan.
4 hours post procedure, check site for fresh bleeding or leakage of gastric contents. If there are no complications flush the tube with 50mls of freshly drawn drinking tap water (sterile if patient is immuno-compromised) via a 60ml Enfit syringe using the gravity method. The patient should be in a position of at least 35 degrees to minimise the risk of aspiration, during feed and 30 minutes after end of feed.
Resume/start feeding regimen prescribed by the dietitian 4 hours post procedure if no complications are evident i.e., prolonged, or severe pain, fresh bleeding, external leakage or swelling. If this occurs, stop the feed or medication immediately, at RDH contact the nutrition nurse specialists 08.00 to 16.30hrs or on call gastroenterologist out of hours, at QHB contact service week gastroenterologist or on call medicine consultant out of hours, to obtain advice urgently, and consider CT. For further information refer to the PEG and RIG troubleshooting - full clinical guideline. https://derby.koha-ptfs.co.uk/cgi-bin/koha/opac-detail.pl?biblionumber=831

Up to 7 days following insertion

If the PEG site requires cleaning, use an ANTT technique and sterile 0.9% sodium chloride solution and dry thoroughly. **DO NOT** move the fixation plate.
Check observations and site 4 hourly for the first 72 hours post procedure.
Observe the site daily for signs of infection - discharge, swelling or redness. Send a swab for microscopy culture & sensitivity (MC& S) if any of the above are noted, document and report the findings.

Ensure that the tube is flushed with at least 50ml of freshly drawn drinking tap water (sterile if patient is immuno-compromised) via a 60ml oral/enteral syringe using the gravity method prior to and following feed/medication administration.
If you have any concerns about the position of the external fixation device, please contact the nutrition nurse specialist at RDH, service week gastroenterologist at QHB
Ensure that the clamp is moved (within the top 1/3 of the tube) each time it is used.

After 7 days following insertion

At 7 days post procedure the tube must be inserted and rotated
The external fixation device should be released (note the cm measurement on the tube)
Clean the site, 4cm of the tube and the fixation device using ANTT with 0.9% sodium chloride solution.
The tube should be pushed 4cm into the stomach and turned through 360 degrees, the tube and fixation device should then be repositioned at the noted cm measurement. This must be done at least weekly thereafter, by nutrition nurses at RDH or ward nurse QHB.
Do not immerse the PEG site in water for the first 2-3 weeks, patient should be showered not bathed.
Once the stoma site has healed it should be cleaned at least once per day with warm soapy water and dried thoroughly.
Do not use barrier creams if the site becomes sore.
Ensure that the clamp is moved to a different position (within the top 1/3 of the tube) each time it is used.

RIG

Pre procedure requirements

Patient/Consultant consent to be obtained (for further guidance about capacity to consent please refer to the Trust policy for Consent- including mental capacity act)
Nil by mouth and nasogastric tube for 6 hours pre procedure
100ml of Gastrograffin diluted with 200mls of water (prescribe as "Meglumine amidotrizoate and sodium amidotrizoate) to be given orally or via NG tube at 6pm the day before the procedure.
Peripheral intravenous cannula in situ
Check allergies to antibiotics.
Clotting within normal limits (< 1.3)
Anticoagulants and antiplatelet drugs to be managed in accordance with hospital policy.
Oral hygiene performed and dentures removed.
Ensure that an enteral feeding plan is prescribed.
Ensure patient is wearing a hospital gown.

Nursing management of RIG tubes

First 24 hours following insertion

Check blood pressure, pulse, respirations and temperature half hourly for 2 hours and then hourly until feed commences.
Check RIG site for any bleeding, leakage or displacement.
Check observations and site 4 hourly for the first 72 hours post procedure.
Document the tube details, including fixation device position on nursing care plan.

4 hours post procedure, check site for fresh bleeding or leakage of gastric contents. If there are no complications flush the tube with 50mls of freshly drawn drinking tap water (sterile if patient is immuno-compromised) via a 60ml oral/enteral syringe using the gravity method. The patient should be sat in a position of at least 35 degrees to minimise the risk of aspiration, during feed and 30 minutes after end of feed.
Resume/start feeding regimen prescribed by the dietitian 4 hours post procedure if no complications are evident i.e., prolonged, or severe pain, fresh bleeding, external leakage or swelling. If this occurs, stop the feed or medication immediately, at RDH contact the nutrition nurse specialists 08.00 to 16.30hrs or on call gastroenterologist out of hours, at QHB contact service week gastroenterologist or on call medicine consultant out of hours, to obtain advice urgently, and consider CT https://derby.koha-ptfs.co.uk/cgi-bin/koha/opac-detail.pl?biblionumber=831

N.B Button sutures will be used around the insertion site to allow formation of the tract, these will usually fall off within 6 weeks of insertion

Up to 7 days following insertion

If the RIG site requires cleaning, use an ANTT technique and sterile 0.9% sodium chloride solution and dry thoroughly. **DO NOT** move the fixation plate.
Check observations and site 4 hourly for the first 72 hours post procedure.
Observe the site daily for signs of infection - discharge, swelling or redness. Send a swab for microscopy culture & sensitivity (MC& S) if any of the above are noted, document and report the findings.
Ensure that the tube is flushed with at least 50ml of freshly drawn drinking tap water (sterile if patient is immuno-compromised) via a 60ml oral/enteral syringe using the gravity method prior to and following feed/medication administration.
If you have any concerns about the position of the external fixation device, please contact the Nutrition Nurse Specialist at RDH, gastroenterologist at QHB

After 7 days following insertion

Observe the site daily for signs of infection, discharge, swelling or redness. Send swab for microscopy culture and sensitivity (MC& S) if any of the above are noted and document the findings.
Ensure that the tube is flushed with at least 50mls of freshly drawn drinking tap water (sterile if patient immuno-compromised) via a 60ml oral/enteral syringe using the gravity method prior to and following every feed/medication administration.
Once the stoma site has healed it should be cleaned at least once per day with warm soapy water and dried thoroughly. Do not use barrier creams if the site becomes sore.
At 14 days the water in the retaining balloon must be changed:

1. Draw 5mls sterile water into a 5ml luer slip syringe.
2. Move the fixation disc 4cm up the tube and push the tube into the stomach,
3. Clean the site, 4cm of the tube and the fixation disc.
4. Using a 5 ml luer slip syringe withdraw the water from the balloon, hold the tube in place.
5. Using the prepared 5ml syringe refill the balloon.
6. Reposition the fixation disc.

Patients who are discharged within 72 hours of gastrostomy insertion must be given the NPSA information sheet

Managing gastrostomy tube complications

For management of complications immediately post insertion refer to the PEG and RIG troubleshooting guideline. https://derby.koha-ptfs.co.uk/cgi-bin/koha/opac-detail.pl?biblionumber=831

Tube blockage

To prevent blockage occurring it is important to flush **ALL** tubes daily, regardless of whether they are used or not.
If however the tube becomes blocked the following measures can be taken:
Applying gentle pressure, flush the tube with a 60ml syringe using the plunger, with:

5 - 10ml of warm (previously boiled) water, and/or
5 - 10ml of sparkling water.

Leave for 15 - 20 minutes then flush with water as usual.
Squeeze up and down the length tube, between your fingers and thumb and then flush with water.
Using a syringe with the plunger, draw 20ml of water into the syringe attach to the tube and use a push and pull technique.

Leakage around the PEG/balloon gastrostomy tube

Gently apply traction on the feeding tube and re-secure the external fixation device next to the skin, at previously determined position.
If the problem persists, contact nutrition nurse specialist for advice at RDH, gastroenterologist QHB.

Stoma site infections

If redness, swelling or a discharge is noticed send a swab for M C& S.
Ensure that site is cleaned at least once a day and allowed to air dry.
Unless the site is discharging do not apply dressings.
Ensure appropriate topical agents are prescribed and treatment given as prescribed.

Balloon gastrostomy displacement (if the tube has been insitu for > 4 weeks)

If the balloon gastrostomy has fallen out, contact the nutrition nurse specialist at RDH gastroenterologist at QHB between 08.00am and 4.30pm, outside of these hours ensure that a sterile ‘foley’ catheter the same size as displaced tube if possible (usually 12fg or 14fg) is inserted through the site to approximately 10cms, inflate the balloon as manufacturer's instructions and secure. This will ensure that the tract remains patent as a temporary measure the catheter **must not** be used for administration of feed fluid or medication. Contact the nutrition nurse specialist/gastroenterologist at the earliest opportunity.

If less than 4 weeks following insertion

Contact interventional radiology for reinsertion.

PEG displacement

Request endoscopic replacement and follow instructions for displaced balloon gastrostomy.

Mouth care
If the patient is NBM it is essential that regular mouth care is performed to maintain oral health.

Documentation control

Development of Guideline	Lead nutrition nurse specialist
Consultation with:	Nutrition team Dietetics
Approved By:	Nutrition Steering Group Nutrition team Aug 2024 Trustwide CGG August 2024
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Key Contact:	Lead nutrition nurse specialist