

1.1 Adult Nasogastric Tube (NGT) Insertion and Removal Policy

Policy

Staff will adhere to the new updates in NGT management to ensure patient safety and comfort

Scope

Registered Nurses, RMO's

Associated Documents

- Enteral Feeding Prescription (C260055)
- QMR0004 Prescription Form

Confirmation of Insertion and Documentation requirements

RMO Responsibilities

- All clinical orders for nasogastric tubes insertions must be documented in the clinical notes by the surgical/medical team responsible.

Nursing Responsibilities

- Ensure the requirement for and purpose of the nasogastric tube has been documented within the patients' clinical notes

Clinical Indicators/Purpose for Nasogastric Tube insertion

Appropriate Nasogastric tube selection is dependent on the clinical indication for placement

Decompression indicators

- Post-operative Ileus
- Increased abdominal distention
- Abdominal Pain
- Vomiting associated with any of the above indicators mentioned.

Other indicators

- Provide a route for short term Enteral Nutrition.
- Administration of medication

Correct Tube Insertion

1. Gastric Content Drainage/Decompression Tube selection

Roche Ryles tubes (Sizes 8-16 Fr) are most commonly used for gastric decompression and aspiration of gastric contents

They are not recommended for enteral feeding (> 1 week) as they are associated with the following complications

- Rhinitis
- Oesophagitis
- Gastritis

2. Enteral Feeding Tube selection

Fine bore NGT can be inserted to provide a route for enteral nutrition and hydration of patients.

3. Nasogastric tubes commonly used for enteral feeding include:

- Flexiflo
- Flocare
- Corflo

These provide access for short term enteral nutrition (up to 6 weeks)

4. For mid to long term (>6weeks) it is recommended that a Percutaneous Endoscopic Gastrostomy (PEG) tube be considered.
5. If a Post Pyloric Tube insertion is required, the surgical /medical team responsible for the patient should contact the Radiology department and send the appropriate referral

Note:

- Seek clinical guidance from senior medical, nursing staff and dietitian with regards to the recommended size tube for the patient. This can range from 8-16 Fr.
- Ensure gauge is appropriate for viscous medication administration if required.
- A weighted enteral feeding tube tip gravitates preferentially to the posterior oropharynx, pointing towards the oesophagus reducing the potential risk of misplacement.
- An oral syringe (catheter tip syringe) must be used with medication administration through a nasogastric tube.

Checking the Correct Positioning of NGT

1. Correct Tube position **must** be checked:
 - on insertion **and**
 - before every feed or medication administration
 - If there is suspected displacement following vomiting, excessive coughing or accidental dislodgement by patient
2. Confirmation of gastric contents must be confirmed using ph indicator strips. Auscultation of air insufflated via the nasogastric tube **should not** be used and litmus paper is not longer recommended)
3. Confirmation of correct position **must** be documented in the clinical notes.
4. Enteral Feeding Tube considerations
 - All naso- gastric enteral feeding tubes (Fine bore and wide bore tubes) must have correct placement **confirmed by an X-ray** before administering any feed
 - All patients that require enteral feeding must **be referred to the Dietitian** prior to commencement of enteral feeding.

Complication Considerations

1. If dislodged the NGT **must not be re-inserted** in patients who have received an:
 - Oesophagectomy
 - Gastrectomy

In this case Nursing staff are to notify senior medical staff immediately
2. Other potential complications following insertion of a NGT include:
 - Oesophageal Perforation
 - Aspiration
 - Fistula Formation
 - Knotting/Kinking of the tube

Contra indications

- Reduced LOC (Ward Level)
- Maxillo-Facial Disorders/Surgery
- Fractured Skull
- Disorders of the nasopharynx/oesophagus

Insertion Equipment

- Lubricant (water based)
- Baker-PHIX pH Indicator Strips 2.0 – 9.0 (0.5 pH graduation)
- Skin prep, Flexi-Trak or Naso-Fix securing dressing
- Tissues and towel
- Disposable pad
- White Plastic Container
- 50mL catheter or Luer lock syringe (if introducer to remain in for X-ray purposes)
- Non sterile gloves
- Apron
- Continuous drainage bag and holder
- Naso-gastric Pack
- Local anaesthetic spray (needs to be prescribed on QMR0004 Form)
- Permanent marker pen
- Glass of water & a straw

Procedure

Step	Action
1	Ascertain the need for the nasogastric tube, i.e. feeding or aspiration/decompression. Verify the order for tube placement – with medical staff/senior nursing staff before proceeding.
2	Identify the correct patient, explain and discuss the procedure to the patient forewarning them that they may experience some discomfort. Agree on a signal that the patient can use to stop during the procedure e.g. raising hand
3	Position the patient in an upright position in a bed or a chair. This position assists swallowing and increases the oesophageal opening. Support the head with pillows and assemble equipment.
4	Check the patient's nostrils are patent by asking the patient if possible to sniff with one nostril closed. Repeat with the other nostril. (Apply local anaesthetic spray if charted)
5	Measure the length of the tube to be inserted and mark by placing the end of the tube at the tip of the patient's nose and then extend the tube to the earlobe and 5cm past the xiphisternum. Lubricate tip of tube (3-4cms) with a reasonable coating of lubricating gel. If possible ask patient to have a sip water to lubricate pharynx.
6	Gently, insert the lubricated tube into the selected nostril. Using the natural curve of the NGT facing downward, slide the tube backwards and inwards along the floor of the nose to the nasopharynx. If any obstruction is felt, withdraw the tube and try again in a slightly different direction or use the other nostril. Resistance will be encountered at the posterior wall of the nasopharynx. Once past the nasopharynx rotate tube between fingers so that natural curve should be running along posterior pharyngeal wall. Ask patient to put their head as forward as possible – chin to chest (neck flexed)
7	As the tube passes down the oropharynx, instruct patient to swallow (if appropriate) sips of water, advancing the tube gently with each swallow. Insert tube as far as marked length. Note: Do NOT force the tube. Seek Medical or Specialist Nursing assistance if you are unable to insert the tube.
8	Observe for respiratory distress. Remove tube immediately if this occurs Ask the patient to open their mouth. Check that the tube is not curled up at the back of the patient's mouth.

9	<p>Aspirate contents of the stomach or obtain immediate drainage with a syringe and test acidity using the Ph indicator. Ensure the pH is ≤ 5.5</p> <p>Note: pH levels can be altered by certain medications, including antacids, Omeprazole and histamine H2 – receptor blocking agents such as Rantidine (Zantac), Cimetidine (Tagamet), Famotidine (Pepcid) and Nizatidine (Axid).</p> <p>The pH can also be altered by the presence of enteral feeds.</p> <p>If the patient has taken above medications and pH indicator unclear, ensure correct placement with an X-ray</p>
10	<p>If aspirate cannot be obtained, inject 30 mL of air and try again.</p> <p>If still unable to aspirate fluid, move patient onto left side so gastric contents are sitting within the greater curvature and wait 30 minutes before trying to aspirate again.</p>
11	<p>If there are any doubts regarding the placement of the tube or if the patient's condition causes concern such as</p> <ul style="list-style-type: none">• In-effective cough, swallow reflex• Previous episode of misplacement <p>An X-ray must be obtained to confirm placement.</p>
12	<p>Measure the external length of the tubing and document in clinical record. Tape tube to patient's nose to secure it. For patients with an increased risk of accidental removal, tape the tube behind the patient's ear and secure down the neck. Attach a spigot or a continuous drainage bag if ordered (ensure that the bag is placed below stomach level).</p>
13	<p>Educate patient re securement to avoid accidental removal. Document the insertion of the tube, stating time, reason for insertion and volume of aspirate in the patient's clinical record.</p>

Removal of Nasogastric tube

Equipment

- Non-sterile Gloves
- Disposable Apron
- Tissues, Protective Sheet
- White Plastic Container
- Clinical Waste Bag
- ‘Remove’ Swabs

Procedure

Step	Action
1	Verify verbal/written order for removal of NGT from medical team responsible for patients care. Identify the correct patient, explain and discuss the procedure to the patient, ensuring privacy and adequate lighting.
2	Wash hands and prepare equipment required as per local infection control policy Volume 10.
3	Ensure that patient is placed in an upright in a bed or a chair, supporting the head with pillows.
4	Aspirate the gastric contents before removal then flush NGT with 10-20mls of air (this will dispel any residual fluid that may be located at the distal end of the tubing)
5	Remove securing adhesive strips or Naso-Fix dressing.
6	Instruct patient to take a deep breath and hold, this will close off the glottis and reduce the risk of potential aspiration whilst removing the tubing.
7	While removing the tubing, pinch the tubing, this will prevent any contents in the tubing from draining into the patient's throat.
8	Observe nasal mucosa for signs of trauma or ulceration, ensuring patient is comfortable post removal of tubing.
9	Document procedure on Fluid balance chart and in clinical records.

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