University Hospitals of Leicester NHS
NHS Trust

Insertion, Management and Removal of Nasal Retention Devices to secure Naso-gastric & Naso-Jejunal Tubes in Adults:

Policy and Procedures

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CONTENTS

KEY WORDS

Nasal bridle, nasal loop, bridle, nasal retention device, NRD, securing NG tube

REVIEW DATES AND DETAILS OF CHANGES MADE DURING THE REVIEW

Nil Changes

1. INTRODUCTION AND OVERVIEW

1.1. This document sets out the University Hospitals of Leicester (UHL) NHS Trust Policy and Procedures for the insertion, management and removal of nasal retention devices, to secure a naso-gastric or occasionally, a naso-jejunal tube, in adults.

1.2. Naso-gastric tubes (NGT) to provide nutrition, fluid and/or medication are the most common type of feeding tube used in the acute hospital setting. These tubes are secured with tape or an adhesive dressing and displacement is common. Repeated displacement can result in malnutrition and/or inadequate provision of medication and hydration. Repeated replacement of NGT can cause discomfort to the patient, as well as the use of additional resources and early referral onto other services such as radiology or endoscopy for gastrostomy tube placement.

1.3. A nasal retention device (NRD) is a specialist device that secures the NGT and reduces the risk of inadvertent displacement. It is also referred to as a bridle and consists of two magnetic probes, one with a length of cotton tape attached. The probes are inserted into each nostril until the magnets connect. The probes are then removed one at a time until a loop is created around the vomer bone. This loop is attached to the feeding tube with a fixation clip. The NRD secures the tube in place and causes discomfort if the NGT is pulled. In appropriately selected patients the use of a NRD have been shown to significantly reduce the displacement of NGT ensuring effectiveness of this feeding route (Seder et al, 2010).

1.4. Ethical considerations must be appropriately assessed. Patients who repeatedly remove their NGT may do so because they are confused, and/or agitated and may lack capacity to understand the consequences of continuing to pull on a NGT with a NRD inplace. A NRD will normally only be in the patient's best interest if all other alternatives have been explored. Alternative measures if NGT are pulled out include; other fixation devices such as griplocks or use of mittens, (including any necessary deprivation of liberty safeguards authorisation). Use of a NRD if these measures fail would only be indicated if the consequences of not using a NRD are likely to amount to serious harm.

1.5. Recognition is given to the fact that the use of NRD may be associated with some risks and complications. A standardised approach to the process will assist in reducing the risk of complications.

2 POLICY SCOPE

2.1 This Policy applies to all registered healthcare staff who insert a NRD and all registered, non registered and pre-registration professionals who care for patients with a NRD.

2.2 This Policy applies to pre-registration student nurses caring for these patients whilst under the supervision of their mentor / assessor.

2.3 This Policy recognises the definition of an adult as a person over the age of 16 years. A person in special education will be an adult over the age of 19 years.

2.4 Patients may be transferred out of UHL NHS Trust with a nasal retention device insitu. Post discharge the responsbility of ongoing care-planning moving forward lies with the provider Trust.

3 DEFINITIONS AND ABBREVIATIONS

Nasal Retention Device (NRD): Device used to secure a nasogastric tube inplace

Nasogastric tube (NGT): A tube passed through the nose into the stomach

Nasojejunal tube (NJT): A tube passing through the nose into the small bowel, via the stomach.

Enteral Nutrition (EN): The delivery of nutrition via the gastrointestinal tract.

Home Enteral Nutrition Service (**HENS)**: Community Dietitians (Leicestershire Partnership NHS Trust) who support patients at home on enteral nutrition

Leicestershire Intestinal Failure Team (LIFT): Nutrition Support team consisting of Gastroenterology Consultants, Chemical Pathologist, Nutrition Specialist Nurses, Specialist Dietitians and Pharmacists.

NSN: Nutrition Specialist Nurse

4 ROLES AND RESPONSIBILITIES

4.1 The **Executive Lead is** the Chief Nurse.

4.2 **CMG Heads of Nursing, Deputy Heads of Nursing and Matrons alongside & Heads of Service** are responsible for ensuring CMG clinical teams are trained and competent and are aware and familiar with this policy.

4.3 **Clinical Staff** are responsible for:

i) referring to this NRD Policy and understanding their responsibilities of care for the patient.

ii) ensuring that they have received appropriate training and assessment of competences in the insertion of the NRD.

iii) acting in the best interests of the patient at all times.

iv) Ward sisters are responsible for keeping an accurate account of staff training and competencies, including a record of members of staff whom have completed LCAT competencies training.

4.4 **Nutrition Specialist Nurses**

i) Coordination of education and training including bespoke training for clinical areas.

ii) Staff competency assessment using LCAT assessment tool (appendix 4)

iii) Insertion of NRD

5. POLICY IMPLEMENTATION AND ASSOCIATED DOCUMENTS

5.1 This Policy is supported by the following procedures and information attached as appendices

No	Appendix	Page
1	Nasal Retention Device Indications, Contraindications	7
2	Placement of a Nasal Retention Device	9
3	Monitoring and care of a patient with a nasal retention device	11
4	Care Plan	12
5	LCAT assessment for Placement of a NRD	14

5.2 This policy is supported by the following associated procedures for Adult patients which must be used in conjunction with this policy:

Policy	Trust Reference
Insertion and Management of Nasogastric & Orogastric Tubes in Adults:Policy and Procedures (new version of Naso-gastric and Naso-Jejunal policy updated 2018)	B39/2005
Administration of medicines to adult patients who cannot swallow tablets or capsules – Guidelines for Practice	B16/2004
Mental Capacity Act UHL Policy	B23/2007
The Deprivation of Liberty Safeguards (DOLS) Policy & Procedures	B15/2009

6 EDUCATION AND TRAINING REQUIREMENTS

6.1 Only Doctor and Registered Nurses who have been appropriately trained and competency assessed in the placement of a NRD may carry out this procedure. Clinical staff have a responsibility to ensure they are competent to undertake the procedure unsupervised and must update their knowledge as required. Any education or training issues should be highlighted at appraisal and addressed through the personal development plan. Re-confirmation of competency must be considered if a staff member has not undertaken the procedure for over 12months

6.2 All staff should undertake relevant complementary training and should have completed their core essential to job training including consent, mental capacity and DOLS training (see Core Training Policy REF B12/2005)

6.2 It is the responsibility for all community carer/s involved in the post-insertion care of enteral feeding tubes to ensure they are competent. Any education or training issues should be highlighted with the HENS who will provide community training for the carer/s.

7 PROCESS FOR MONITORING COMPLIANCE

Compliance will be monitored by regular audit undertaken by the Nutrition Specialist Nurse Team. Audits will include the number of NRDs placed and compliance with completion of relevent documentation and care plans. These

findings will be used to identify any further training needs and may be used in updating this policy.

Key element to be monitored	Lead	Tool	Frequency	Reported via
This policy is followed in relation to NRD tube insertion	Clinical Lead Nutrition Support Team	Annual Prevalence Survey	Annually	UHL Nutrition & Hydration Committee

8 EQUALITY IMPACT ASSESSMENT

8.1 The Trust recognises the diversity of the local community it serves. Our aim therefore is to provide a safe environment free from discrimination and treat all individuals fairly with dignity and appropriately according to their needs.

8.2 As part of its development, this Policy and its impact on equality have been reviewed and no detriment was identified.

9 SUPPORTING REFERENCES, EVIDENCE BASE AND RELATED POLICIES

Mental Capacity Act (2005) see Mental Capacity Act UHL Policy (Trust Ref B23/2007)

The deprivation of Liberty Safeguarding (DOLS) policy & Procedures (Trust Ref B15/2009)

National Nutrition Nurses Group Good Practice Guidelines (2017) Safe Insertion of a retaining Device for Nasogastric and Nasojejunal feeding tubes in Adults.

Royal College of Physicians and British Society of Gastroenterology (2010) Oral Feeding, Difficulties and Dilemmas: A guide to practical care, particularly towards the end of life, Royal College of Physians, London

Saunders TFC & Osbourne MS (2015) A rare complication of Nasal Retaining Loop Insertion, Austin J Otolaryngology 2(4): 1038

Seder CW, Stockdale W, Hale L, Janczyk RJ (2010) Nasal Bridling decreases feeding tube dislodgement and may increase caloric intake in the surgical intensive care unit:a randomized, controlled trial, Cricital Care Medicine 38(3):797-801

10 PROCESS FOR VERSION CONTROL, DOCUMENT ARCHIVING AND REVIEW

10.1 The updated version of the Policy will then be uploaded and available through INsite Documents and the Trust's externally-accessible Freedom of Information publication scheme. It will be archived through the Trusts SharePoint system.

10.3 This Policy will be reviewed every three years or sooner in response to clinical risks /incidents identified.

Nasal Retention Device to Secure a Naso-gastric or Naso-jejunal tube: Indications and Contraindications	Appendix 1

Introduction and Scope

This Procedure is used to insert a NRD into an adult patient in a ward or department area to secure a nasogastric or nasojejunal tube. It can be undertaken by staff trained to do so.

1	**Patient selection** The patients primary Consultant is responsible for identifying suitable patients for NRD insertion**.** The rationale for the decision to place a NRD must be clearly documented in the patients medical notes.
2	**Indications for Placement** The following are indications for placement of a NRD to secure a NGT/NJT: • Multiple displacements of NGT where there is documented evidence in the patient notes that this is inadvertent displacements of more than 3 displaced NGT within 72 hours. Prior to consideration of a NRD other means of securing and maintaining the NGT should be considered first,including: Fixation devices such as griplocks to secure the NGT Mittens • The reasons why the patient is removing the NGT should be fully explored. • Elective use of a NRD to retain the NGT which would be extremely difficult to replace or when replacement would be a high risk, and/or a technically difficult procedure, such as those that require NGT placement endoscopically, radiologically or in theatre.
3	**Contraindications** A NRD **must not** be used if the patient has any of the following (unless agreed with the Consultant in charge of the patients care): • Mechanical obstruction of the nasal airway • Facial fractures • Anterior cranial fractures • Abnormal Coagulation. If platelets <50, INR and/or apttr >1.5 discuss with medical or haematology teams. Apply caution in patients on therapeutic anticoagulation. For patients with inherited or acquired coagulation abnormalities, suggest discussion with haematology SpR or haemostasis team. • Recent severe bleeding from the nose • Nasal trauma or ulceration Caution must be used in patients with behaviours that challenge, or those with

	severe agitation if there is concern that they will repeated pull on the NGT, even if a NRD is in place (increasing risk of complications). If the practitioner fails to insert the NRD after 2 attempts, the procedure must be stopped and advice sought from the patients Consultant/Senior Clinician. A NRD must not be inserted if there are non staff competent to place or maintain the device.
4	**Consent** The practitioner inserting the NRD should discuss the rationale for its use with the patient and give a full explanation of the procedure. Verbal consent must be obtained and documented in the medical notes. If there is a question about the patients ability to give informed consent the managing clinical team are required to complete a mental capacity assessment. If the patient lacks capacity, the team are required to to make a formal best interest decision and document this appropriately in the patients medical notes. This must be discussed with the patient's family or representative. If the person is unbefriended and has no-one appropriate to consult with (other than paid carers) then an IMCA must be instructed and consulted. Refer to UHL MCA Policy (Trust Ref B23/2007).

Placement of a Nasal Retention Device to secure a Naso-Gastric or Naso-Jejunal tube	Appendix 2

Introduction and Scope

This Procedure is used to insert a NRD into an adult patient in a ward or department area and can be undertaken by staff trained to do so.

1	**Type of NRD used in UHL (correct as of April 2023)** Corgrip NG/NI Feeding Tube Retention System which is available in size 8 – 16FG. **The size selected should be the same as the nasogastric tube insitu so that the clamp fits.**
2	**Insertion Procedure** **1.** First ensure the decision to use a NRD has been clearly documented by the medical team and any relevant paperwork is completed i.e Mental Capacity and Best Interests Assessment (Policy Ref B23/2007 and B15/2009). **2.** The NRD should be placed by medical and relevant nursing staff (nursing staff in key clinical areas such as neurology and NSN) who are competent to do so. **3.** Ensure the NGT has been inserted and if possible the position has been confirmed as per the Nasogastric and Orogastric Policy in Adults (Ref B39/2005). If the position has not yet been confirmed, the NRD can be inserted to secure the tube and position changed by repositioning of the tube and clip as required. **The nasogastric tube tube must not be used to administer any feed, fluids or medication until the tube position has been confirmed.** **4.** Note the marking at the nose of the inserted tube and document in the care plan (in centimetres cm). **5.** Explain the NRD procedure to the patient, gain verbal consent and agree on a stop sign. **6.** Using a clean procedure, wearing apron and gloves, check the NRD is the correct size for the inserted tube and open the NRD pack. **7.** Lubricate both of the probes and the ribbon with lubricating gel,taking care to avoid lubricating the metal tips and place the yelloew probe of the insertion kit into the nostril to the marked ridge. Use the nostril opposite to the NGT. **8.** Place the white probe of the insertion kit into the same nostril as the NGT, to the same length as the yellow probe. The click as the magnets attach should be heard or felt. If not, gently manipulate the probes until the magnets attach behind the vomer bone. **9.** When the connection has occurred slowly withdraw the white probe until the ribbon is clearly visable and the probe is completely out of the nostril (approx.. 10cm). **10.** Slowly withdraw the yellow probe until the ribbon is visable and the probe is completely out of the nostril. **11.** Pull the white probe until the ribbon is completely out of the probe and

	disconnect the yellow probe from the ribbon at the magnet. **12.** Adjust the ribbon so an equal length extends form each nostril **13.** Place the NGT and both lengths of ribbon into the clip and close tightly. The clip should sit 1 cm away from the nose to prevent pressure damage. Consider the use of lubricating gel on the ribbon as it can be rough on the nasal muscosa. **14.** Tie a double knot in the ribbon just underneath the clip and trim any excess. **15.** Secure the NGT to the patients cheek using a clear adhesive dressing. **16.** Clear away equipment and dispose of as per Trust Policy. **17.** Document in the medical notes and care plan that the NRD has been inserted, and any difficulties, complications or bleeding related to the procedure. Stickers are available and can be obtained via the Nutrition Nurses or Stroke Unit.
3	**Removal Procedure** If the patient has previously consented to the NRD then withdraws consent, or the patient becomes distressed by the NRD it must be removed whether the decision to place the NRD has been assessed as being in the patients best interests or not. When removal of the NRD is required, cut one side of the ribbon (between the nose and the clip) and gently pull both the NRD and the NGT out at the same time. The current manufacturer recommendation is that the NRD is removed after 30 days of being placed so elective replacement must be considered at this time.

Monitoring and care of a patient with a Nasal Retention Device securing a NGT	Appendix 3

1	**Use of the feeding tube** Always check the position of the NGT as per local policy (Ref B39/2005). Having a NRD in situ should not detract from confirming gastric placement using pH testing or x-ray.
2	**Potential Complications** • Epistaxis: Minor blood on the NRD is common after insertion however there is a risk more major bleeds may occur. • Nasal trauma or damage to the nasal septum: This may occur either on insertion or due to pressure necrosis or rupture of the septum from patients pulling in the NRD or tube. • Sinusitis or Rhinitis: Infection may be more likely to occur with NRD or NGT/NJT and may require antibiotic treatment or removal. • The NGT may become displaced through retching or vomiting or violent coughing despite the NRD being secure. Should the patient display signs of unexplained respiratory symptoms, coughing, or vomiting of feed the following steps should be taken. - Stop using the tube immediately and seek urgent medical advice. -Check the position of the tube using documented tube measurements, pH indicator strips or in exceptional circumstances x-ray.
3	**Care Plan** ***Following Insertion:*** ▪ Note and document the position of the nasogastric tube at the distal end of the Bridle Clip. ▪ Ensure tapes are not twisted or applying pressure to the nose ▪ If required secure the nasal tube to the cheek for comfort and to prevent traction of the bridle with a transparent dressing ***Daily:*** ▪ Clean external, visible parts of the NRD and nostrils with soap and water ▪ Check ribbon used to secure NRD is not twisted. ▪ Check clip for signs of damage or loose attachment to the NGT. ▪ If the patient continues to pull at the NGT while the NRD is in situ causing unreasonable distress, discuss with medical team/nutrition nurse and consider removal. ***The Nasal Mucosa Close To The Retention Device must be checked for Sore Areas and Erosions at least twice daily***

Name: ID label NHS Number: Hospital No: Ward:	University Hospitals of Leicester NHS NHS Trust

Naso Retention Device Care Plan

Nurses - Please sign to confirm that the medical team have documented the decision and rationale for placing NRD tube in the patients case notes and have requested a NRD is to be placed by the bedside

Date: Time: Signature: Designation:

Insertion of Nasal Retention Device

	Date & time of insertion	Measurement of NGT to nostril (tube length cm)	Position of NRD (record position of NGT at distal end of clip)	Tube secured to cheek	Name, Signature of professional inserting NRD tube
1				Y / N	
2				Y / N	

The Nasal Mucosa Close To The Retention Device Is To Be Checked At Least Twice Daily for Sore Areas and Erosions

NASAL MUCOSA SCORE	ACTION NEEDED
1. = No Redness	Maintain Care and Observation of the Mucosa
2. = Slight Redness	Re-position the tape Securing the NGT and continue to monitor
3. = Erosion Evident	Remove Nasal Retention Device

Ongoing Monitoring

Date & time	Position of NRD (record position of NGT at distal end of clip). Has position changed?	Nasal Mucosa Score?	Is the patient pulling on the NGT?	Safe to continue use?	Name, Signature

The Nasal Mucosa Close To The Retention Device Is To Be Checked At Least Twice Daily for Sore Areas and Erosions

NASAL MUCOSA SCORE	ACTION NEEDED
1. = No Redness	Maintain Care and Observation of the Mucosa
2. = Slight Redness	Re-position the tape securing the NGT and continue to monitor
3. = Erosion Evident	Remove Nasal Retention Device

Ongoing Monitoring

	Date & time	Position of NRD (record position of NGT at distal end of clip). Has position changed?	Nasal Mucosa Score?	Safe to continue use?	Name Signature

Position of the Naso-gastric tube must still be confirmed by pH testing or x-ray prior to use.

LCAT Assessors Recording Form: Assessment — Appendix 5

Your Name : Date:	ASSESSOR :
Skill: **Nasal Retention Device Insertion**	

COMPETENCE CATEGORY	POSITIVE FEATURES	WEAKNESSES / OMISSIONS
Communication and working with the patient	Gives full explanation to patient Gains verbal consent. Documents in notes Ensures patient privacy and dignity Knows appropriate actions if patient lacks capacity to consent Positions patient correctly Arranges stop signal with patient Ensures patient comfort post procedure	
Safety	Confirms Decision and rationale for NRD insertion is documented in medical notes by lead clinician. Understands contraindications and what action to take should an NRD be contraindicated. Can discuss potential complications. Checks allergy status (including latex)	
Infection control	**Pre-procedure** Cleans hands prior to the start of the procedure (Including prior to donning gloves) Cleans aseptic field (Chlor-Clean allow to air dry) Protects key parts from contamination throughout the procedure **Procedure** Hands cleaned on entering the patient zone and/or immediately prior to the procedure and before reapplying gloves Key parts protected from contamination throughout the procedure Hands cleaned following the procedure and/or prior to leaving the patient zone Aseptic field cleaned before storing	
Procedural competence	Gathers all necessary equipment. Is able to safely insert NRD as per UHL policy. Secures the NG Tube to the patients cheek using a clear adhesive dressing. Disposes of all waste as per UHL policy.	
Team working	Correctly records all relevant information for NRD insertion using all correct documents. Ensures copy of care plan in nursing folder.	

Nasal Retention Device sticker for medical notes.

Nasal Retention Device Insertion

Consultant decision documented: [ ]

Patient consent gained: [ ]

If not able to consent, Best Interests Decision documented: [ ]

NRD

Batch No:..... Make .....

Inserted by:.....Signature:.....

Date..... Time..... _ _ _ _ _Care plan in Nursing notes: [ ]

NG Tube Type:

Fine Bore Feeding Tube [ ] Combined drainage / feeding tube [ ]

NGT secured with a NRD must still have gastric position confirmed