University Hospitals of Leicester

# Management of Naso-jejunal Enteral Feeding Tubes in Adults:

**Policy and Procedures** 

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### REVIEW DATES AND DETAILS OF CHANGES MADE DURING THE REVIEW

V1 (2019) was a new policy extracted as a stand alone policy from the old 'The Insertion and Management of Nasogastric and Nasojejunal Tubes in Adults' Policy (Ref B39/2005:V5).

V2 (2022) No changed to content required.

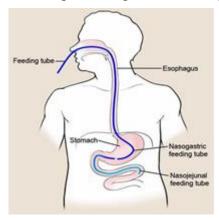
V3 (2025) Changes made to Insertion of nasojejunal tubes. Bedside placement of NJ tubes is done in Paediatrics only.

#### KEY WORDS

NJ, nasojejunal, naso-jejunal, NJ, NJT, post pyloric feeding, trans-pyloric feeding, enteral, feeding tube

#### 1. INTRODUCTION AND OVERVIEW

- **1.1.** This document sets out the University Hospitals of Leicester (UHL) NHS Trusts policy and procedures for the indication, insertion and post insertion care of nasojejunal tubes (NJT) for enteral tube feeding on adult wards.
- **1.2.** Jejunal tube feeding is the method of feeding directly into the small bowel. The feeding tube is passed into the oesophagus, on into the stomach, through the pylorus and into the duodenum or jejunum. This type of feeding can also be known as post-pyloric or trans-pyloric feeding. Indications for use include delayed gastric emptying such as gastroparesis, or altered anatomy and/or persistent vomiting where gastric feeding is deemed an unsuitable route of nutrition.



- **1.3.** This policy and its supporting procedures aim to support staff in the ongoing management of NJT's in all patients by:
  - 1.3.1. Providing clear directives for the safe position checking of NJT's.
  - 1.3.2. Ensuring NJT feeding is incorporated into the patient's care plan.
- 1.4. Medications administered via enteral feeding tubes must be done so after consultation with the Administration of Medicines to patients who cannot swallow tablets or capsules Guidelines for Practice (B31/2008). Due to the narrow gauge and length of the tube, NJT are at increased risk of blockage and must be adequately flushed.

#### 2. POLICY SCOPE

- **2.1.** This adult Policy applies to all registered and non registered health care professionals who care for patients with a NJT insitu.
- **2.2.** This adult Policy applies to pre-registration student nurses and midwives caring for these patients whilst under the supervision of their mentor / assessor.
- **2.3.** This Policy applies to patients and carers who are being trained. Training provided by UHL staff must be line with this policy around NJT care.
- **2.4.** Patients may be transferred out of UHL NHS Trust with a NJT insitu. Post discharge the responsibility of ongoing care-planning moving forward lies with the provider Trust.
- **2.5.** 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.

#### 3. DEFINITIONS AND ABBREVIATIONS

**Enteral Nutrition (EN)**: The delivery of nutrition via the gastrointestinal tract involving an enteral feeding tube.

**Home Enteral Nutrition Service (HENS)**: Community services supporting patients at home receiving enteral tube feeding.

**ICE** Trust electronic system for service referrals

**Leicestershire Intestinal Failure Team (LIFT)**: Nutrition Support team (Nutrition Specialist Nurses, Specialist Dietitians) supported by Gastroenterology Consultants, Consultant Chemical Pathologist, Microbiology and Pharmacists.

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

**Nasojejunal Tube (NJT):** A tube passed through the nose into the stomach and then advanced into the small bowel, to allow post-pyloric feeding.

#### 4. ROLES AND RESPONSBILITIES

4.1. The Executive Lead is the Chief Nurse.

- **4.2. CMG Heads of Nursing, Deputy Heads of Nursing and Matrons, alongside & Head of Service** are responsible for ensuring CMG clinical teams are trained and competent and are aware and familiar with this policy.
- 4.3. Medical Staff / Competent Clinician is responsible for;
  - i) Identifying suitable patients for NJT insertion, seeking guidance from appropriate teams, such as LIFT, radiology, gastroenterology if required.
  - ii) Where enteral nutrition is being considered, ensuring the decision to commence NJT feeding is based on the patient's nutritional status and goals of overall therapy. The rationale must be documented in the medical notes.
  - iii) Ensuring that the NJT is not used until placement is confirmed on an abdominal plain film X-ray.
- **4.4. Radiologists and appropriately trained reporting Radiographers** are responsible for documenting the position of the NJT and tip when reporting the placement film.
- **4.5. Senior CMG Heads and Deputy Heads of Nursing and Matrons** are responsible for ensuring adequate staffing levels of EN competent nurses within their clinical areas.
- **4.6. Ward Sisters / Charge Nurses a**re responsible for ensuring development on the ward or unit of appropriate numbers of EN competent staff and responsible for ongoing monitoring of the quality of the EN techniques used within their clinical areas.
- 4.7. Leicester Intestinal Failure Team (LIFT) Contactable on ext 16988 is a multidisciplinary team consisting of the Nutrition Support Team Senior Specialist Dietitians and Nutrition Nurse Specialists supported by Consultant Gastroenterologists, Chemical Pathologists and Microbiology, and Pharmacists LIFT is responsible for offering expert advice on the care and management of patients requiring artificial nutrition via an enteral feeding tube.

On referral LIFT will undertake an assessment and offer advice and guidance on problematic EN patients, liaising with health care staff as appropriate.

Nutrition Specialist Nurses (NSN) are responsible for supporting all staff members in caring and treating patients on EN within UHL in line with this protocol and will provide expert advice, support and clinical input on an individual patient basis to patients requiring artificial nutrition, medication or fluids via an enteral feeding tube, as requested.

- **4.8. Registered Nurses / Midwifes** are responsible for the individual care of patients requiring artificial nutrition and ensuring that the care they provide to this patient group is in line with UHL policies and procedures and are appropriately trained. In particular, ensuring that NJT care is provided as detailed in this policy and procedures and if there is uncertainty over the placement of the tip of the tube that feed is not administered and medical advice is sought.
- 4.9. Ward / area Nutrition Link Nurse / LCAT Assessor are responsible for supporting their clinical area in developing and sharing knowledge and skills in first line NJT care learnt from Link Nurse days.
- 4.10. **Student Nurses** are responsible for following UHL policy when caring for a patient with an enteral feeding tube and to report any patient changes or problems with the enteral feeding tube to the Registered Nurse.
- 4.11. Informal Carers are responsible for undertaking appropriate training overseen by a competent Registered Practitioner, and reporting any patient changes or problems with the enteral feeding tube to the Nursing Staff or Dietitian.

#### 5. POLICY IMPLEMENTATION AND ASSOCIATED DOCUMENTS

5.1 This Policy is supported by the following information

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Naso-Jejunal Care Plan	13

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

Policy	Trust Reference
Enteral Feeding – Preventing Drug Nutrient Interactions UHL guidelines	B62/2019
Insertion, Management and Removal of Nasal Retention Devices to secure Naso-gastric & Naso-Jejunal Tubes in Adults: Policy & Procedures	B21/2018
Administration via an Enteral Feeding Tube in Adults: Policy and Procedures	B30/2019
Guideline for Commencing out of hours enteral tube feeding (Nasogastric) in Adult Inpatients (including Management of Refeeding Syndrome	B55/2006
(specific critical care and renal guidelines are also available)	

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Policy	Trust Reference
Mental Capacity Act UHL Policy	B23/2007
The Deprivation of Liberty Safeguards (DOLS) Policy & Procedures	B15/2009

5.3 If any member of staff identify issues related to the management of a NJT this must be reported on the trust Datix system.

#### 6 EDUCATION AND TRAINING REQUIREMENTS

- 6.1 It is the responsibility for all UHL staff involved in the post-insertion care of NJT to maintain competence and skills. Any education or training issues should be highlighted at appraisal and addressed through the personal development plan. Bespoke training for ward areas, or individual members of staff can be provided by the NSN as required.
- 6.2 It is the responsibility for all medical staff reporting tip placement confirmation of NJT after radiological investigation to ensure that they are competent to do so. Trainee Practitioners identifying training needs in Radiology should flag up needs with their Educational Supervisor, Consultant staff, their appraiser or the Associate Medical Director Medical Education.

#### 7 PROCESS FOR MONITORING COMPLIANCE

Element to be monitored	Lead	ΤοοΙ	Frequency	Reporting arrangements
Management of Naso- jejunal tubes	Clinical Lead, Nutrition Support Team (part of LIFT)	Review of Datix Audit to encompass: Documentation of indication, position prior to initial use, removal and careplan completed	Quarterly Biannunally	UHL Nutrition & Hydration Committee

#### POLICY MONITORING TABLE

#### 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

British Association of Parenteral & Enteral Nutrition www.bapen.org

Lord L. Enteral Access Devices: Type, Function, Care and Challenges, Nutrition in Clinical Practice, 33(1):16-38. 2018

Stroud M, Duncan H, Nightingale JMD. Guidelines on Enteral Nutrition, Gut. 2008

National Institute for Health and Clinical Excellence (NICE) guidance: Nutrition Support for Adults, Feb 2006 [last updated 2017]

#### 10 PROCESS FOR VERSION CONTROL, DOCUMENT ARCHIVING AND REVIEW

- 10.1 The updated version of the Policy will 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
- 10.2 This Policy will be reviewed every three years or sooner in response to clinical risks /incidents identified.

# Indications for a Naso-Jejunal tube and referral for placement

University Hospitals of Leicester

Appendix 1

#### Introduction and Scope

This procedure is used to appropriately select when a naso-jejunal tube (NJT) should be used for the administration of enteral nutrition, fluid and/or medication in an adult patient.

## 1 Patient selection The patients primary Consultant is responsible for identifying suitable patients for NJT insertion. The rationale for the decision to place a NJ tube must be clearly documented in the patients medical notes acknowledging patient informed consent or best interests decision. 2 Indication for NJ tube placement NJT are not commonly used. They are used to provide enteral nutrition in situations where the gastrointestinal tract is functioning but the stomach needs to be bypassed. The ward Dietitian and/or Leicester intestinal Failure (Nutrition Support) Team is available for support and guidance on specific indications for enteral and parenteral nutrition and routes of administration. Patients can be referred to LIFT on ICE. Indications for a NJT include: Poor gastric motility • Delayed gastric emptying Gastroparesis • Hyperemesis gravidarum Persistent vomiting Partial gastric outlet obstruction (see below) Patients at high risk of pulmonary regurgitation with gastric feeding Upper gastrointestinal surgery or abnormality Pancreatitis (if Nasogastric feeding is not tolerated) 3 Contra-indications / cautions to placement. If the patient has any of the following, appropriateness for NJT placement should be discussed with either Gastroenterology or Radiology. Basal skull fractures Maxillo facial fractures or abnormalities Unstable cervical spinal injuries Nasal / pharyngeal / oesophageal obstruction or other abnormalities such as oesophageal stricture\* or pharyngeal pouch, actively bleeding varices. Trachoesophageal fistula • Post laryngectomy

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	<ul><li>Gastric outflow obstruction*</li><li>Significant upper GI bleeding</li></ul>
	*In some of these circumstances it may be possible to pass a NJT via an obstruction or stricture. Advice should be sought from gastroenterology or radiology.
4	Placement of Nasojejunal tubes
	NJT can be placed in the following ways:
	<ul> <li>ENDOSCOPICALLY. First line placement method</li> <li>RADIOLOGICALLY. Used if direct vision is required or endoscopy placement is contra-indicated or difficult such as oesophageal/pyloric obstruction/stricture.</li> <li>BEDSIDE PLACEMENT. Tube is self propelled through pyloris. Not currently used in Adults at UHL</li> </ul>
5	Type of Nasojejunal tubes used at UHL
	The tubes available for post pyloric, naso-jejunal feeding at UHL should be licensed for this purpose. Any new tubes being introduced for use should be considered by LIFT, Nutrition & Dietetics and procurement teams before orders are made.
	NJT can be single or multi-lumen and are available in a range of sizes $(6 - 16fg, 90 - 150cm)$ . For endoscopy placement, small sized NJT can be placed through the scope rather than over a guidewire, which requires an exchange to nasal placement at the back of the throat and maybe poorly tolerated in some patients.
	A multi-lumen tube is indicated if aspiration of gastric contents or decompression of the stomach is required, inaddition to feeding but this requires a larger sized NJT (16 fg). The Gastroenterologist or Radiologist placing the NJT will select the most appropriate type of NJT for the patient.
6	Referral for placement of a NJ tube
	The patient should be referred to Endoscopy and Radiology, on ICE or via normal referral methods. The referral should clearly state the rationale for post pyloric feeding and whether gastric drainage/decompression is also required.
	If further advice is required regarding the most appropriate mode of enteral feeding (gastric, post pyloric) please referred to LIFT on ICE for assessment.

## Confirmation of Naso Jejunal Tube Position

1	Confirmation of Nasojejunal tube position after initial placement					
	Confirmation of initial tube position must be determined by abdominal x-ray. NJT placed in endoscopy maybe misplaced on withdrawal of the endoscope so an abdominal x-ray is required to reconfirm tip position following the procedure.					
2	Documentation of Nasojejunal tube type and position					
	Following insertion the procedural report should detail:					
	i) Method of insertion					
	ii) The type of tube used					
	Manufacturer's name					
	Number of lumens (If there is more than one port, how these can be identified					
	Batch number					
	iii) Post pyloric position achieved and how this has been or should be confirmed					
	iv) The external tube length at the nostril (this should be documented in the care plan)					
	v) Any variance to standard insertion protocol and the reason for it					
	Nothing should be administered via the NJT until position has been confirmed and documented in the patients notes.					
3	Monitoring of Nasojejunal tube positioning during use					
	It is not possible to aspirate and test pH of the jejunal contents to confirm position of a NJT. Aspirating a single lumen NJT may cause the tube to collapse or coil back. With a multi- lumen NJT, when aspirating the gastric port, if it appears to be feed (in terms of appearance) this is a sign that the tip of the NJT is no longer post-pyloric.					
	It is therefore essential that the external placement marker (length of tube at the nostril) is documented to confirm it has not altered from initial placement. This should be checked each time the NJT is used. A significant change in the NJ tube length (of more than 5cm) at the nostril may indicate that the tip of the NJT has moved.					
	If a patient vomits, retches or has excess coughing there is a risk of internal misplacement, where the tip of the NJT may return to the stomach. This can occur even if the external length of the NJT has not moved.					
	In any of these situations, enteral feeding should be stopped and nothing else administered down the tube until senior medical advice is sought. Post-pyloric placement may need to be reconfirmed by x-ray.					

#### 1 Securing a Nasojejunal Tube

Nasojejunal tubes can often be difficult to place so displacement must be avoided where possible. All NJT must be secured firmly in place with the use of a nasal retention device (see separate policy: Insertion, Management and Removal of Nasal Retention Devices to secure Naso-gastric & Naso-Jejunal Tubes in Adults: Policy & Procedures B21/2018) and/or dressing on the cheek.

Before securing the tube to the cheek, consider cleaning the skin with alcohol wipe to remove grease from the skin and increase adherence of the dressing / tape.

#### 2 Maintaining patency of the Nasojejunal tube

NJT are at increased risk of blockage compared with naso-gastric tubes. They should be flushed with sterile water using an ENFIT enteral syringe 6 – 12hourly, unless medication is being given more frequently (see UHL policy Enteral Feeding Tube Administration in an Adult Patient (in development).

If the NJT is not being use to administer enteral nutrition it must still be flushed with sterile water at least once in every 24hr period.

Where possible avoid administering medication via the NJT and always refer to the trust policy (Administration of Medicines to patients who cannot swallow tablets or capsules – Guidelines for Practice (B31/2008). Some medication may not be suitable for administration via a NJT if the normal route of absorption is gastric. Other preparations such as thick elixirs and crushing of medication should be avoided where possible as this will increase the risk of the NJT blocking. A pharmacist must review all medication to be administered via a NJT to determine if it is appropriate.

Enteral nutrition should be administered following referral and review by a Dietitian, using the feeding regimen provided, usually kept in the nursing folder.

#### 3 Management of Complications related to Nasojejunal tubes.

#### Displacement

If the external tube length alters or vomiting, retching, aspiration of feed is seen from multilumen NJT with a gastric port, NJT position must be reconfirmed by abdominal x-ray if post pyloric position is still required. Contact the department that placed the NJT is the tube needs to be replaced.

#### NJ Blockage

The risk of blockage is reduced by regular flushing and following advice regarding administration of medication (see above and following care plan). If the NJT becomes

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	blocked try dislodging the blockage using a gentle push/pull motion on the plunger of the syringe with sterile water, and massaging the blockage to help it disperse. If the NJT remains unblocked contact the LIFT Nutrition Nurse Specialists or the department that inserted the NJT for further advice.
	Nasal Erosion
	The Nasal cavity should be checked at least daily for sore areas, bleeding and ulceration
	Other potential complications
	<ul> <li>Awareness of increase in swallowing action, predominantly in a recumbent position, which may indicate post nasal bleed due to tube trauma.</li> </ul>
	Skin integrity compromised by adhesive or tube pressure.
	Medical staff should be informed by the qualified nurse looking after the patient if any of these symptoms are present.
4	Nasojejunal Tube Removal
	NJT should be flushed with sterile water and remove in the same way as a nasogastric tube at the bedside.
	Explain the procedure to the patient and obtain their informed verbal consent
	Provide tissues for the patient to clean or blow their nose after removal of the tube
	Clean hands and put gloves and apron on
	Take off the fixation tape and gently withdraw the tube through the nostril
	Ensure the NJT is intact and document removal. If there are any concerns with bedside removal contact the department that inserted the NJT for further advice.

Appendix 4

Name:

NHS Number:

Hospital No:

Ward:

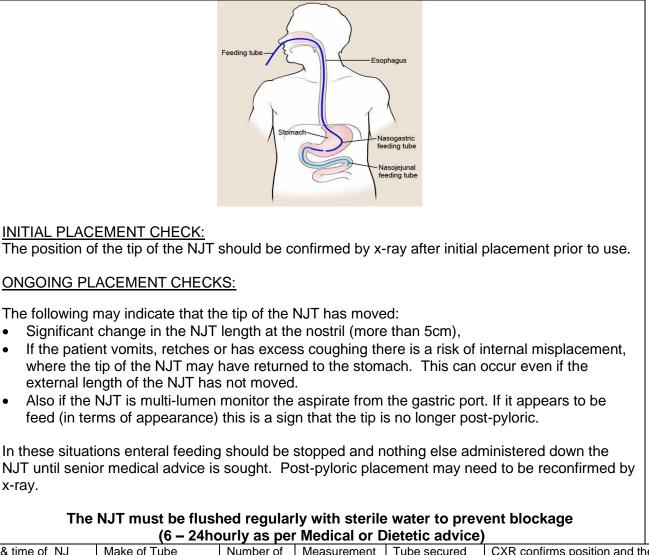
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# Naso-Jejunal Care Plan for Adult Patients

University Hospitals of Leicester

**NHS Trust** 



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Date & time of NJ tube insertion	Make of Tube	Number of lumens? 1 / 2 / 3	Measurement to nostril (tube length)	Tube secured to Cheek? Y / N	CXR confirms position and the is documentation that safe to in medical notes	
Date: T	ime: Signature	):		Name & Des	signation:	

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NASO-JEJUNAL CARE PLAN						
Date & Time	Length of Tube at Nostril	Position Moved YES / NO	Vomiting / retching / reflux YES / NO	Evidence/Concern NJT is not safe to use Y / N. If YES discuss with medical team	Flush given 6-12hourly while NJT in use	Signature Name