East of England Neonatal ODN
(Hosted by Cambridge University Hospitals)

Clinical Guideline:

Authors: Emma Smith – Senior Sister Norfolk and Norwich University Hospital, Amy Willgress – Practice Development Nurse EoE ODN, Rachel Stamp – Lead Physio EoE ODN, Jayne Fenton-Smith Lead Occupational Therapist EoE ODN, Laura Baird Lead Speech and Language Therapist EoE ODN

For use in: EoE Neonatal Units
Guidance specific to the care of neonatal patients.

Used by: Medical and surgical teams, ANNPs, Midwives, Nurses, Nursery Nurses, Allied Health Professionals,

Key Words: Nasojejunal

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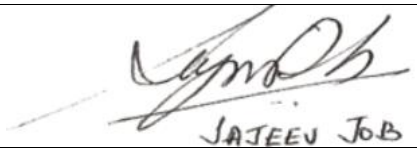
Approved by:

Neonatal Clinical Oversight Group	
Clinical Lead Sajeev Job	

Ratified by ODN Board:

Date of meeting	

Audit Standards:

Audit points

Contents

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1. Purpose

To provide consistent regional guidance to support staff in the insertion and management of nasojejunal tubes (NJT) in neonatal units.

To support local neonatal units in facilitating the safe and timely repatriation of babies and their families to their local neonatal unit.

2. Objectives

The objective of this guideline is to support staff in the safe management of NJT in all babies by:

- Maintaining consistency in practice across the region
- Providing clear direction for the safe and effective placement of an NJT
- Providing clear direction for the safe position-checking of an NJT

- Ensuring NJT feeding is incorporated into the baby's care plan

3. Scope

This guideline is relevant to all staff involved in the insertion of an NJT and in caring for babies with an NJT in situ, across neonatal units within the East of England Neonatal ODN.

4. Background

An NJT is a long silastic tube which is inserted via the nostril into the stomach, through the pylorus, past the duodenum and into the proximal part of the jejunum. Once correctly positioned milk feeding can be commenced safely without the risk of reflux as the stomach is essentially bypassed.

Gut peristalsis moves the feed along the small bowel, where it is digested and absorbed by the baby. Feeds can only be given by continuous infusion, as there is no capacity for storage in the small bowel.

Although some medications can be given via an NJT, the majority need to be given directly into the stomach for activation by gastric acid. Advice from a neonatal pharmacist may be useful.

A dietitian should be involved in the care of babies on NJT feeds to ensure the baby is receiving adequate nutrition and hydration.

Insertion of an NJT must always be carried out in hospital.

5. Glossary

NGT / OGT	Nasogastric Tube / Orogastric Tube
NICU	Neonatal Intensive Care Unit
NJT	Nasojejunal Tube
OJT	Orojejunal Tube
LocSSIP	Local Safety Standards for Invasive Procedures
MDT	Multidisciplinary Team

6. Indications for NJ Feeding

NJT feeding is indicated when it is not safe or effective to feed via the stomach, due to:

- Risk of gastro-oesophageal reflux causing pulmonary aspiration of refluxed material
- Decreased gastric motility / emptying
- Persistent vomiting

- Inability to obtain optimal nutrition via another route
- Congenital gastrointestinal abnormalities
- Congenital muscular problems

7. Contraindications

- Basal skull fracture
- Maxillo-facial or nasopharyngeal abnormalities

In these cases, the use of an orojejunal tube (OJT) should be considered.

8. Risks

- Small bowel perforation, especially duodenal perforation
- Gastric bleeding
- NJT displacement, e.g. back into the stomach
- Failure of the NJT to pass beyond the pylorus, with resultant coiling in the stomach
- Radiation exposure from serial X-rays
- Malabsorption

9. Procedure

9.1 Informing the family

Ensure that the family is informed of the following:

- The indication for the NJT/OJT
- What the procedure will involve
- The likely duration of the tube's placement
- Potential difficulties of this feeding route and system
- Parents should be encouraged to be present during the procedure, should they wish, to provide comfort and support to their baby

9.2 Preparation

Refer to the **EoE Pain Management Guideline (Section 8: Non-pharmacological measures in reducing pain and stress in the infant)** throughout this procedure, to ensure the baby's pain and

comfort are prioritised and maintained. The baby should be settled and comfortable before the procedure commences.

- The baby does not need to be nil by mouth; however, it is not advisable to pass the tube immediately following a large feed, due to the risk of aspiration. Each baby should be individually assessed and, if in doubt, medical advice should be sought.
- This procedure should be performed using an Aseptic Non-Touch Technique (ANTT).
- Select an appropriately sized NJT (6 French for babies below 4kg; consider 5 French for babies below 2kg) and ensure the correct feeding tube is available. Familiarise yourself with the tube's length markings.
- The NJT is supplied with a guidewire, which must be removed prior to insertion.

9.3 Measuring the tube

- Measure the distance for insertion of a nasogastric tube — from nose to ear, then down to the xiphisternum. Record this as **Distance A**.
- Measure the distance for insertion of the nasojejunal tube — from the bridge of the nose, down the body to the ankle, with the leg extended (see **Figure 1** below). Record this as **Distance B**. A tape marker can be placed on the NJT at this length.

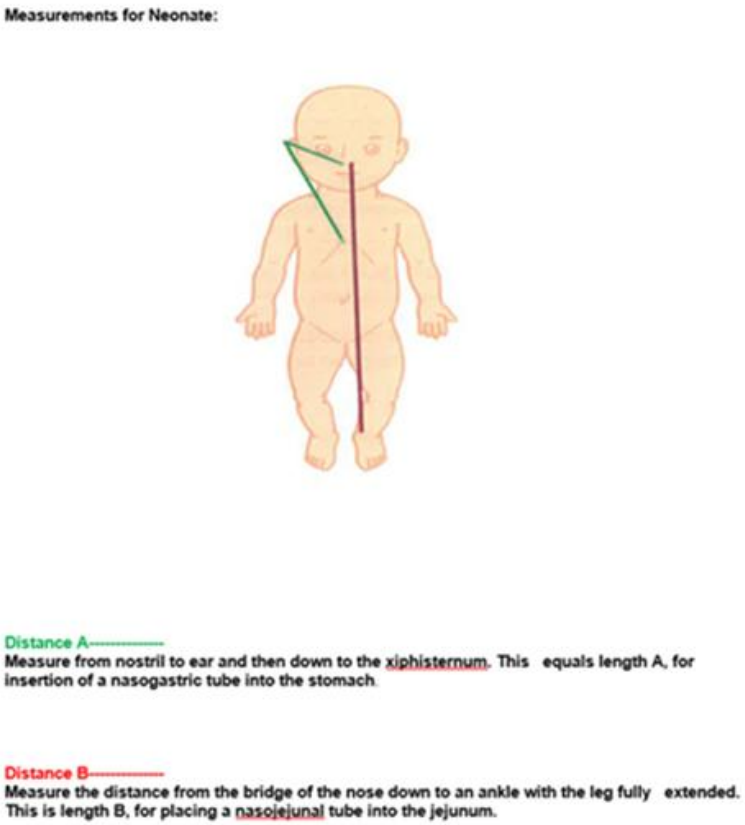

Figure 1: Measurement of nasogastric (Distance A) and nasojejunal (Distance B) tube insertion lengths.

9.4 Insertion

1. Lie the infant on their right side and insert the NJT through the nostril, as for a gastric tube, until Distance A is reached.
2. Once correct gastric placement is confirmed via pH testing, flush the NJT with 0.5ml of sterile water to encourage peristalsis, then slowly advance the tube 1cm every 15–30 minutes.
3. Flush with 0.5ml of sterile water before each advance, until Distance B is reached. If resistance is felt, try flushing with water to aid passage. If resistance persists, withdraw slightly and try again.
4. **NEVER push against resistance.** Where possible, keep the baby positioned on their right side with the head of the bed raised 15–30 degrees.
5. After at least one hour — sufficient time to allow peristalsis to move the tube through the pylorus — confirm the tube position with fluoroscopy or an extended chest and abdominal X-ray.
6. If the baby shows signs of unusual breathlessness or severe coughing during passage of the tube, remove it immediately.
7. A consultant must confirm that the tube position is satisfactory before feeding via the NJT commences.
8. Document the insertion and length of insertion of the NJT clearly in the patient record.
9. Throughout procuedure, ensure skin integrity is maintained and NJT is secured appropriately to reduce risk of displacement. Please refer to East of England Clinical Guideline – Maintenance of Skin Integrity. A pectin-based barrier can be utilised to decrease the amount of epidermal stripping due to fixing at intervals throughout the insertion process.
10. If the baby does not already have a naso/orogastric tube (NGT/OGT), insert one. An NGT/OGT is required for medication administration and to help confirm the NJT has not displaced back into the stomach.

10. X-Ray Interpretation

- The NJT tip should pass through the pylorus and around the C-shaped duodenum. The tip should lie either in the midline (over a vertebral body) or to the left of the patient's midline, in the jejunum.
- If the NJT is in too far and is seen to be curling in small bowel loops, gently withdraw. The exact distance to withdraw can be measured on the X-ray.
- If the NJT is through the pylorus but lies short, advance further as needed and repeat the X-ray until the position can be confirmed.
- If the NJT is coiled in the stomach without passing through the pylorus, remove the tube and prepare for another attempt at placement.
- If the NJT has taken an unusual path within the bowel, remove the tube and discuss the case with the MDT.

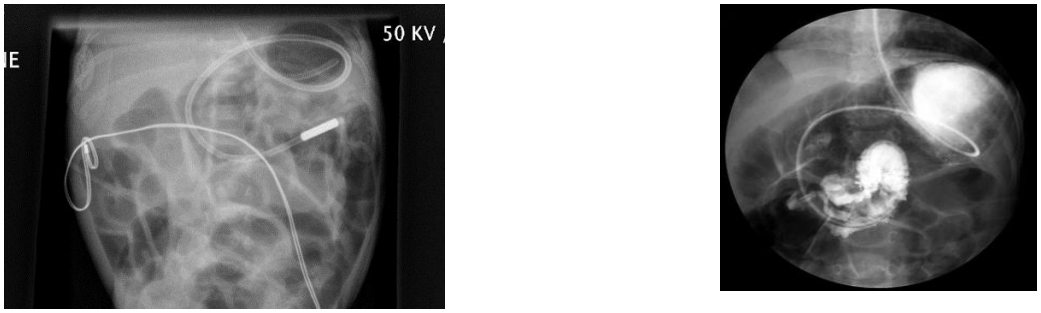

Figure 2: Correct NJT position — tip lies in the jejunum, to the left of midline, having passed around the C-shaped duodenum (left); fluoroscopic confirmation of tip in the proximal jejunum (right).

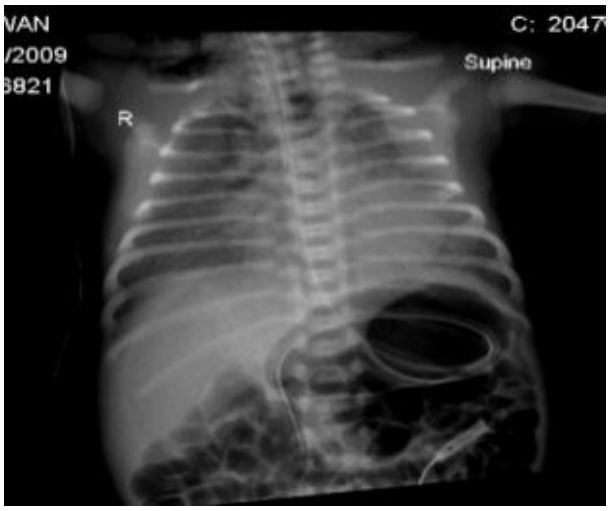

Figure 3: NJT looped in the stomach, passing through the pylorus but lying short in the 2nd part of the duodenum — the tube requires further advancement to reach the jejunum.

Figure 4: NJT has taken an abnormal path straight down after the pylorus, raising suspicion of duodenal perforation — remove immediately.

11. Tube Management

- Check nasal passages regularly to ensure they are clean and clear of blockages. Give special attention to redness, soreness, swelling and bleeding.
- If the tube is not in use, flush with 1–2ml of sterile water every 4 hours.
- If the tube is in use but the feeding regimen includes a break in continuous feeds, flush with 1–2ml of sterile water after stopping the feed, and again with the same amount before restarting.
- Check the length of the NJT hourly to confirm the tube remains in situ.
- Aspirate the NGT/OGT every 6 hours to ensure no milk is present in the stomach. Milky aspirate indicates the NJT may have slipped back into the stomach. Feeds should be stopped until a suitable position is confirmed.

12. Additional Information

- Ensure a gastric tube is also in place for aspirating and administering medication.
- Follow NPSA 2011 guidance to reduce harm caused by misplaced feeding tubes on the neonatal unit.
- NJT feeds should be given by continuous infusion via a pump.
- Change feeding giving sets every 4 hours and replace with freshly prepared milk. For expressed breast milk (EBM) feeds, an enteral syringe driver should be used where possible. The shorter giving set reduces the loss of milk fat through adherence to the tubing, thereby improving nutrient delivery and reducing EBM wastage.
- Many medications require gastric contents to begin absorption and may not be suitable for intestinal administration, as absorption can be reduced and harm caused. In general, oral medication should be given via the NGT/OGT and not the NJT. Discuss any queries with a neonatal pharmacist.
- Confirm NJT/OGT position by recording the length markings at the nostril after each insertion and at every feed change. Seek medical advice for any deviation.
- Document fully in the patient record.

13. Warnings

⚠ Warnings

- Do not aspirate the NJT — this causes collapse and recoil of the tube.
- Do not bolus feed via the NJT, as the jejunum has no space for storage.
- If the baby vomits milk, stop feeds immediately and repeat the X-ray to confirm NJT position.

- If the NJT becomes blocked, flush gently with 1–2ml of sterile water. If it remains blocked, a new tube must be inserted.
- If the NJT migrates outward by a few centimetres, push back down and consider repeating an X-ray to check tip position.
- If an X-ray is not deemed necessary, aspirate the gastric tube shortly after restarting feeds via the NJT to ensure no milk is returned.

14. References

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Exceptional Circumstances Form

Form to be completed in the **exceptional** circumstances that the Trust is not able to follow ODN approved guidelines.

Details of person completing the form:	
Title:	Organisation:
First name:	Email contact address:
Surname:	Telephone contact number:
Title of document to be excepted from:	
Rationale why Trust is unable to adhere to the document:	
Signature of speciality Clinical Lead: Date:	Signature of Trust Nursing / Medical Director: Date:
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Kelly Hart
EOE ODN Office Manager
Box 402
Rosie Hospital
Robinson Way
Cambridge University Hospital
Hills Road
Cambridge CB2 0SW