Belfast Health and Social Care Trust
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Policy Code: BHSCT/SHWH/Mat (13) 2022

Title:	**Insertion of an Orogastric (OGT) or Nasogastric tube (NGT) by nurses/midwives in the RNU, RJMS**		
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Responsible Director:	Heather Jackson, Interim Director for Trauma, Orthopaedics, Rehab Services, Maternity, dental, ENT and Sexual Health		
Policy Type: (tick as appropriate)	*Directorate Specific ☒	Clinical Trust Wide ☐	Non Clinical Trust Wide ☐
If policy type is confirmed as ***Directorate Specific** please list the name and date of the local Committee/Group that policy was **approved**			
Directorate Governance Approval	10/03/2022		
Approval process:	Standards and Guidelines Committee Executive Team Meeting	**Approval date:**	05/04/2022 13/04/2022
Operational Date:	April 2022	**Review Date:**	April 2027
Version No.	2	**Supercedes**	V1 – January 2017 – January 2022
Key Words:	Orogastric tube, Nasogastric Tube, Neonate, gastric feeding		
Links to other policies	BHSCT Enteral Tube Feeding: Administration of milk feeds via an orogastric (OGT) or nasogastric (NGT) tube to a baby in the RNU, RJMS (2019) SG 58/16		

1.0 INTRODUCTION / SUMMARY OF POLICY

In the neonatal environment, the use of naso/orogastric tubes is an integral part of nutritional care for many of the babies. It provides a means of delivering nutrients to the baby, with minimal energy expenditure and therefore supports growth and development. We cannot visually confirm the exact placement of the tube when in use, thus we need to follow a clinical procedure to confirm the safe position of the tube, on insertion. The procedure is the same for both nasogastric and orogastric tubes.

1.1 Purpose

- To provide nursing and midwifery staff with guidelines to follow when inserting an OGT or NGT in a baby in the RNU
- To ensure the correct placement of the OGT/NGT by accurate measurement and accurate pH testing thus enabling the safe delivery of an orogastric /nasogastric feed and/or the administration of medications to a baby in the RNU.

1.2 Objectives

- To ensure the safe insertion and care of a neonate with an OGT/NGT

2.0 SCOPE OF THE POLICY

- All nursing and midwife staff caring for a baby in the RNU
- All babies on the RNU

3.0 ROLES AND RESPONSIBILITIES

All nursing and midwifery staff caring for a baby who requires the insertion of an OGT /NGT should follow this guideline in order to provide safe evidence based quality care to the baby.

4.0 CONSULTATION

Neonatal Clinical Educator

5.0 POLICY STATEMENT/IMPLEMENTATION

In the RNU the OGT/ NGT confirmation is confirmed by gastric aspirate which is pH tested or in some cases by chest/abdominal x-ray

NOTHING should be administered down the OGT/NGT before gastric placement has been confirmed

Do not use a lubricant prior to inserting an OGT/NGT

Do not use auscultation (whoosh test) to determine the OGT/NGT position

Do not interpret the absence of respiratory distress as an indicator of the correct OGT/NGT position

The **pH** of the gastric aspirate must be checked and **≤ 5** before commencing feeds

Ensure the tube is taped securely prior to commencing feeding.

The OGT/NGT should be changed every 7 days as per manufacturers' recommendations.

Complete the 'Recording insertion and placement of naso/orogastric tube record' documentation.

Always use enteral feeding syringes.

Provide comfort measures prior to OGT/NGT insertion.

If the baby has a surgical condition and is nil orally, a size 8fg or 10fg OG enteral tube (attached to free drainage) should be used to facilitate gastric decompression and emptying.

Nasogastric tubes should be avoided in premature babies or those with respiratory compromise.

5.1 Dissemination

This guideline will be circulated amongst all key workers, Excellence and Clinical Governance Committee and Supervisors of Midwives. Once ratified by the standards and guidelines Committee it will be displayed on the BHSCT intranet site.

5.2 Resources

Teaching and assessment at induction
Annual peer assessments
Parents guide to tube feeding

5.3 Exceptions

This procedure applies to the RNU RJMS.

6.0 MONITORING AND REVIEW

This guideline reflects the current practice for inserting gastric tubes in the RNU. This guideline may be updated if current practice changes.

7.0 EVIDENCE BASE/REFERENCES

Vildan Apaydin Cirik, Emine Efe, (2020) *The effect of expressed breast milk, swaddling and facilitated tucking methods in reducing the pain caused by orogastric tube insertion in preterm infants: A randomized controlled trial,* International Journal of Nursing Studies, Volume 104,103532 https://doi.org/10.1016/j.ijnurstu.2020.103532.

NMC (2018) The Code. London. NMC

BAPEN principal author: Jones BJM Dr (2020) *a position paper on nasogastric tube safety: time to put patient safety first.* Malnutrition and Nutritional Care in the UK - BAPEN

Boxwell. G. (2020) Neonatal Intensive care Nursing. Gastric Tube Placement. Chapter 13. Diagnostic and Therapeutic procedures

8.0 APPENDICES

Appendix 1 Procedure for insertion of a nasogastric/orogastric tube
Appendix 2 Confirming the correct position of nasogastric tubes in neonates
Appendix 3 How to measure the tube and why you may not be able to get any aspirate
Appendix 4 Insertion of a silk NGT with a guidewire
Appendix 5 Gastric tube sizing.

9.0 NURSING AND MIDWIFERY STUDENTS

Nursing and/or Midwifery students on pre-registration education programmes, approved under relevant 2018/2019 NMC education standards, must be given the opportunity to have experience of and become proficient in **Insertion of an Orogastric (OGT) or Nasogastric tube (NGT) by nurses/midwives in the RNU, RJMS** where required by the student's programme. This experience must be under the appropriate supervision of a registered nurse, registered midwife or registered health and social care professional who is adequately experienced in this skill and who will be accountable for determining the required level of direct or indirect supervision and responsible for signing/countersigning documentation.

Direct and indirect supervision

- Direct supervision means that the supervising registered nurse, registered midwife or registered health and social care professional is actually present and works alongside the student when they are undertaking a delegated role or activity.
- Indirect supervision occurs when the registered nurse, registered midwife or registered health and social care professional does not

directly observe the student undertaking a delegated role or activity. (NIPEC, 2020)

This policy has been developed in accordance with the above statement.

Wording within this section must not be removed.

10.0 EQUALITY IMPACT ASSESSMENT

The Trust has legal responsibilities in terms of equality (Section 75 of the Northern Ireland Act 1998), disability discrimination and human rights to undertake a screening exercise to ascertain if the policy has potential impact and if it must be subject to a full impact assessment. The process is the responsibility of the Policy Author. The template to be complete by the Policy Author and guidance are available on the Trust Intranet or via this **link**.

All policies (apart from those regionally adopted) must complete the template and submit with a copy of the policy to the Equality & Planning Team via the generic email address equalityscreenings@belfasttrust.hscni.net

The outcome of the equality screening for the policy is:

Major impact ☐
Minor impact ☐
No impact ☐

Wording within this section must not be removed

11.0 DATA PROTECTION IMPACT ASSESSMENT

New activities involving collecting and using personal data can result in privacy risks. In line with requirements of the General Data Protection Regulation and the Data Protection Act 2018 the Trust considers the impact on the privacy of individuals and ways to militate against any risks. A screening exercise must be carried out by the Policy Author to ascertain if the policy must be subject to a full assessment. Guidance is available on the Trust Intranet or via this **link**.

If a full impact assessment is required, the Policy Author must carry out the process. They can contact colleagues in the Information Governance Department for advice on Tel: 028 950 46576

Completed Data Protection Impact Assessment forms must be returned to the Equality & Planning Team via the generic email address equalityscreenings@belfasttrust.hscni.net

The outcome of the Data Protection Impact Assessment screening for the policy is:

Not necessary – no personal data involved ☐
A full data protection impact assessment is required ☐
A full data protection impact assessment is not required ☐

Wording within this section must not be removed.

12.0 RURAL NEEDS IMPACT ASSESSMENT

The Trust has a legal responsibility to have due regard to rural needs when developing, adopting, implementing or revising policies, and when designing and delivering public services. A screening exercise should be carried out by the Policy Author to ascertain if the policy must be subject to a full assessment. Guidance is available on the Trust Intranet or via this link.

If a full assessment is required the Policy Author must complete the shortened rural needs assessment template on the Trust Intranet. Each Directorate has a Rural Needs Champion who can provide support/assistance.

Completed Rural Impact Assessment forms must be returned to the Equality & Planning Team via the generic email address equalityscreenings@belfasttrust.hscni.net

Wording within this section must not be removed.

13.0 REASONABLE ADJUSTMENT ASSESSMENT

Under the Disability Discrimination Act 1995 (as amended) (DDA), all staff/ service providers have a duty to make Reasonable Adjustments to any barrier a person with a disability faces when accessing or using goods, facilities and services, in order to remove or reduce such barriers. E.g. physical access, communicating with people who have a disability, producing information such as leaflets or letters in accessible alternative formats. E.g. easy read, braille, or audio or being flexible regarding appointments. This is a non-delegable duty.

The policy has been developed in accordance with the Trust's legal duty to consider the need to make reasonable adjustments under the DDA.

Wording within this section must not be removed.

SIGNATORIES
(Policy – Guidance should be signed off by the author of the policy and the identified responsible director).

24/08/2020

_____ **Date:** _____

Dr Clifford Mayes
Clinical Director

Kathryn McCullagh
Hannah Cousins

06/01/2022

_____ **Date:** _____

Author

10/03/2022

_____ **Date:** _____

Dr Stan Craig

11/04/2022

_____ **Date:** _____

Director

APPENDIX 1 – Procedure For Insertion Of A Nasogastric/Orogastric Tube

Requirements

1. Gastric feeding tube of the appropriate size (see Appendix 5)
2. 5ml oral syringe to aspirate.
3. pH indicator strips
4. Hydrocolloid and tegaderm or tape to secure tube
5. Sterile scissors
6. Enteral tube label
7. Non sterile gloves
8. Plastic apron
9. Disposable waste bag

Procedure

1. Infection prevention and control measures must be carried out throughout the procedure; this includes hand washing and use of alcohol gel using the seven step technique.

2. Collect all necessary equipment. Check that the packing is secure, and that the date is still current.

3. Explain the procedure to the parent(s) if present.

4. Prepare the equipment for use, being careful not to touch any of the key parts.

5. To determine the correct length of the feeding tube to be inserted using a tape measure, measure from the nose/mouth to the earlobe and continue to **mid-way between the Xiphisternum and the umbilicus**. Note the length in cms.

6. Put on apron and disinfect hands with alcohol gel using the 7 step technique.

7. If appropriate administer oral sucrose 2 minutes prior to procedure, or give a small amount of mother's own breastmilk to the baby.

8. Position the baby in the supine position with the head in the mid-line. Swaddle the baby in a blanket or ask a second member of staff/parent to provide containment holding for the baby to comfort and stabilise during the procedure.

9. Apply alcohol gel using the 7 step technique and put on non-sterile gloves

10. Hold the gastric tube with the dominant hand and pass into the nasopharynx or oropharynx. Advance slowly to the pre-determined length. **Never** advance a tube against resistance.

11. Observe the baby for any changes in clinical condition. Stop if a problem arises and remove the tube. Stabilise the baby and allow time recover.

12. When passing a gastric tube nasally, to protect the baby's skin, apply Duoderm to the cheek then secure the tube with tegaderm or tape to the Duoderm, ensuring the pre-determined measurement at nares remains the same. When passing the gastric tube orally it can be more secure without the Duoderm under the tape.

13. Use a 5ml oral syringe to gently aspirate 0.2-0.5ml of gastric fluid. If there is air in the stomach ensure all air is gently aspirated prior to feeding. Place the aspirate onto the pH strip. Allow 10 to 15 seconds for any colour change; compare the colour of the strip to the colour code on the box.

14. The gastric aspirate **must be pH ≤ 5** to confirm the correct tube position.

15. If unable to obtain an aspirate, adjust the OGT by 1-2 centimetres (if any resistance is felt, stop and do not advance further). Recheck the aspirate.

16. Do not use a tube if the position cannot be confirmed

17. Follow the flow chart ensuring the optimum **pH is ≤ 5 (this is our local practice**) (See Appendix 2 and 3)

18. Inform the sister/nurse in charge and then the medical officer if still unable to confirm the position of the NGT/OGT.

19. If the baby requires a chest /abdominal x-ray use this opportunity to confirm the position of the OGT and document position and measurement in the baby's nursing care plan

20. Position the baby and leave comfortable and in a developmentally appropriate position. Ensure vital signs are stable.

21. Remove gloves and apron, dispose of all waste and wash and gel hands.

22. Label the enteral tube with date and time of insertion.

23. If the baby is not receiving enteral feeds, attach a drainage container to the enteral tube and place lower than the baby's head to aid gastric emptying.

24. Document the feeding tube insertion date in the daily examination sheet.

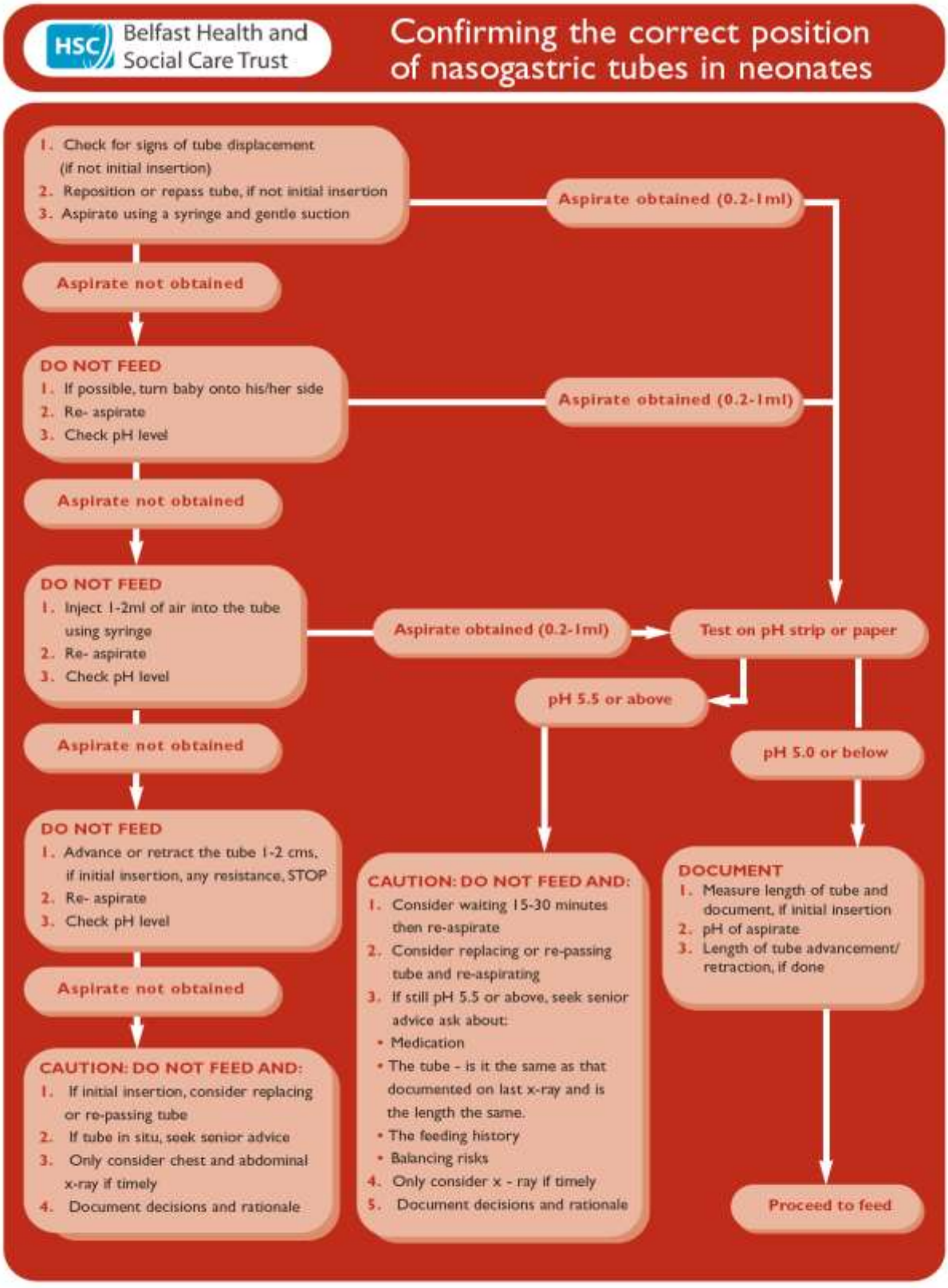
25. Complete the 'Recording insertion and placement of naso/orogastric tube record' documentation.

26. Measure and document the OGT/NGT insertion length and gastric aspirate ph. on the baby's observation sheet/feeding chart

- Before each feed
- Before administrating oral medication
- Following any vomiting, retching or coughing

NB If the baby is receiving continuous oral feeds, check and record the measurement hourly and check the pH at every giving set change or more frequently if needed.

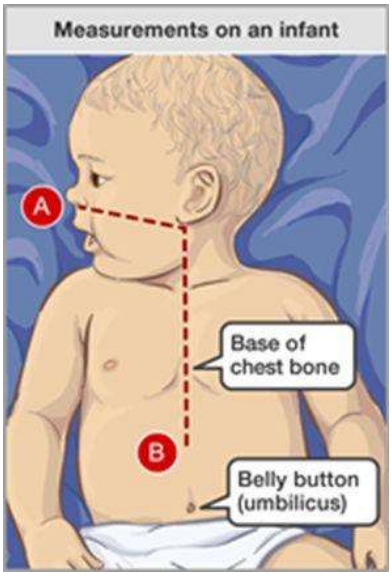
APPENDIX 2



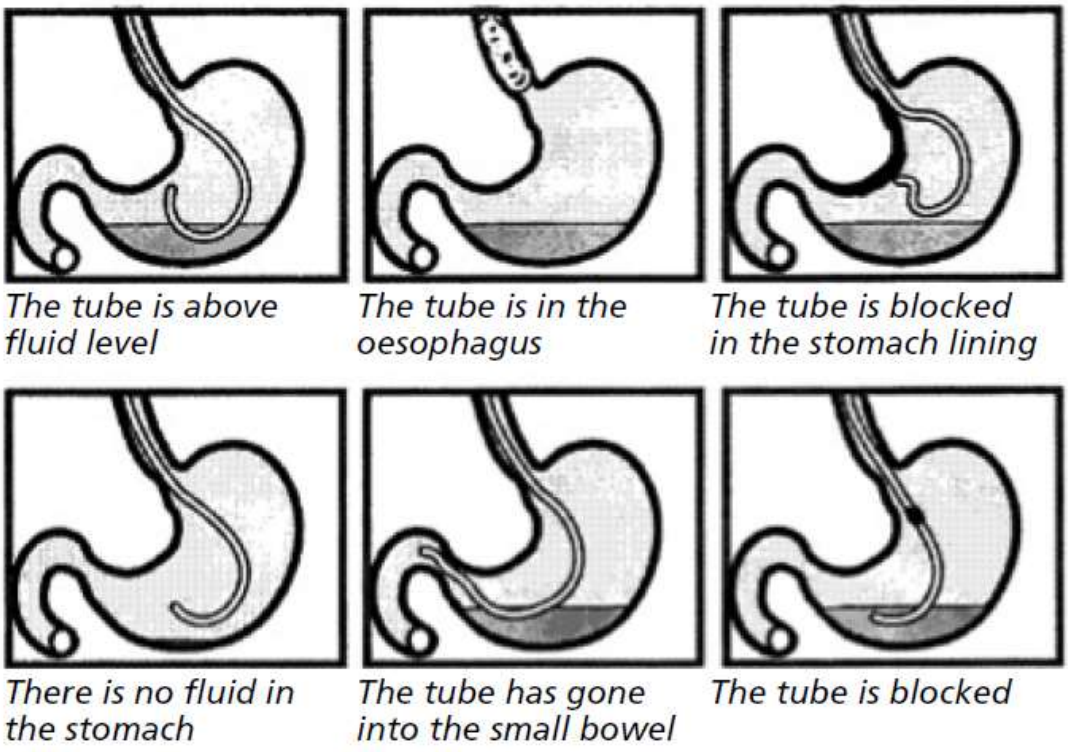
CAUTION: If there is ANY query about position and/or the clarity of the colour change on the pH strip, particularly between ranges 5 and 6, then feeding should not commence.

The information in this document was originally by the National Nurses Nutrition Group NNNG) and further in collaboration with the Medicines and Healthcare products Regulatory Agency (MHRA), the National Patient Safety Agency (NPSA), NHS clinicians and other leading experts in the field. The Patient Safety Research Programme at the University of Birmingham has commissioned additional research to assess these methods further. This advice may therefore be revised following the outcome of this work.

APPENDIX 3 How to Measure the Tube and why you may not be able to get any aspirate



Why you may not be able to get any aspirate



APPENDIX 4

Insertion of a silk NGT with a guidewire

Long life polyurethane feeding tubes (currently CORFLO®)

- When inserting a long life feeding tube which has a guide wire, remove the wire before insertion into the baby. Replace the wire in the original wrapping and dispose the wire into the sharps box. (follow the procedure below)
- When aspirating a long life feeding tube, the tube can “collapse” from the suction/negative pressure, therefore, it is advised to use a 20ml enteral syringe when aspirating, as this exerts less suction/negative pressure
- These long life feeding tubes with guide wires are not single use.(they can be re used for 2-3 months).If the feeding tube becomes displaced, remove the tube from the baby; attach a syringe of sterile water and flush to remove any residue **prior** to re passing.

APPENDIX 5 - Gastric Tube Sizing

Weight of baby	Tube Size
<750g	4fr
750g – 1500g	5fr
>1500g	6fr
Gastric/decompression/surgical pre-term	8fr
Gastric/decompression/surgical Term	10/12fr