Royal Hospital for Women (RHW)
NEONATAL BUSINESS RULE
COVER SHEET

Health
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Local Health District

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FORMER REFERENCE(S)	RHW NCC LOP Nursing - Silastic Tubes (Gastric And Transpyloric)
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SUMMARY	To provide guidelines on gastric silastic tube use including safe insertion, placement and ongoing access for neonates in NCC.
Key Words	Silastic, nasogastric tube (NGT), orogastric tube (OGT), gastric tube, neonate

Contents

This Clinical Business Rule (CBR) is developed to guide safe clinical practice at the Royal Hospital for Women (RHW). Individual patient circumstances may mean that practice diverges from this Clinical Business Rule. Using this document outside RHW or its reproduction in whole or part, is subject to acknowledgement that it is the property of RHW and is valid and applicable for use at the time of publication. RHW is not responsible for consequences that may develop from the use of this document outside RHW.

Within this document we will use the term woman, this is not to exclude those who give birth and do not identify as female. It is crucial to use the preferred language and terminology as described and guided by each individual person when providing care.

1 BACKGROUND

Placement of a polyurethane silastic tube may be indicated in neonates who require longer term management of enteral feeding as these tubes can be left in place for up to 4 weeks, meaning less frequent changes are required. Silastic gastric tubes may also be indicated for neonates who are either being discharged home with ongoing enteral feeding needs or are part of the Hospital in the Home (HITH) program. Silastic gastric tubes can be inserted either via a nasogastric or orogastric route.

The aim of this CBR is to ensure safe insertion, placement, ongoing access of gastric silastic tubes and ensure safe feeding and administration of medications through silastic gastric tubes.

2 RESPONSIBILITIES

2.1 Staff (medical, nursing, midwifery, Allied health)

1.1.1 Medical – identify when appropriate to use silastic gastric tubes, order investigations as required.

1.1.2 Nursing – to safely insert and care for silastic gastric tubes. To provide instruction for safe feeding and administration of medications.

1.1.3 HITH Co- Ordinator – to provide education and support to parents of neonates who have a silastic tube inserted

3 PROCEDURE

3.1 Equipment

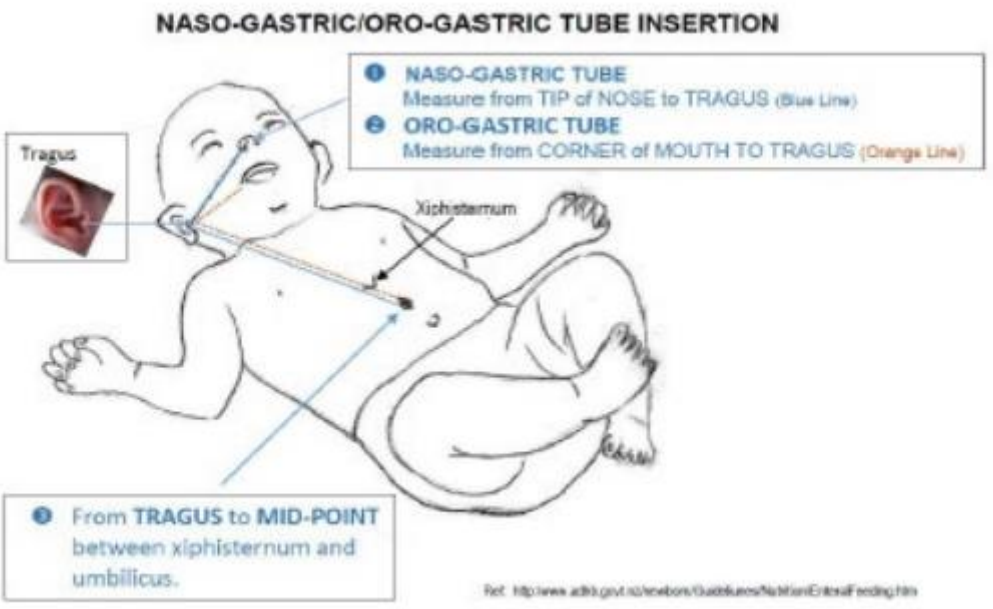
- Enteral CORFLO polyurethane (silastic) feeding tube with stylet and ENFit® connector – 6Fr 91cm
- Enteral feeding adaptor
- Water for Injection vial

- 10 mL enteral syringe
- Transparent hydrocolloid dressing (e.g. comfeel)
- Scissors
- Adhesive tape for securing tube
- Water soluble lubricant
- Sucrose or Expressed Human Milk (EHM) for pain relief (if required)
- Gloves
- Barrier skin wipe (e.g. cavilon)

3.2 Clinical Practice

3.2.1 Insertion

- Confirm the request for gastric silastic tube placement with medical officer.
- Inform parents/carers of requirement for gastric silastic tube (if available).
- Collect equipment.
- Perform hand hygiene.
- Connect the feeding adaptor to the end of the tube.
- Prepare the silastic tube by flushing tube with 2 mL sterile water for injection.
  - This helps to lubricate the inside of the tube, making it easier to remove the guide wire after insertion
- Perform hand hygiene.
- Determine if the silastic tube is to be inserted via nasal (recommended and preferred) or oral (e.g. choanal atresia, nasal CPAP) route and measure appropriately (Picture 1).
  - Nasogastric: Measure the depth of insertion of tube by measuring the distance from the nare to tragus to the midpoint between xiphisternum and umbilicus
  - Orogastric: Measure the distance from the lower lip to the point halfway between the xiphisternum and umbilicus



Picture 1

- Wrap neonate and provide comfort measures including sucrose or EHM administration.
- Perform hand hygiene.
- Ensure all taping for securing tube is cut and easily accessible.
- Ensure skin is clean and apply barrier wipe to cheek (or alternate area for securing tube depending on whether it is orally inserted).
- Place transparent hydrocolloid dressing on area in which tube is to be secured.
- Perform hand hygiene and don gloves.
- Lubricate tip of silastic tube with water soluble lubricant.
- Insert silastic tube to previously determined depth of insertion.
- Remove guidewire gently, ensuring to not dislodge tube placement as wire is retracted.
- Attach 10 mL enteral syringe and gently aspirate 0.5 mL of gastric content.
- Test gastric content to ensure pH ≤6.
- Secure silastic tube with pre-cut taping. Place a marking on the tube with a small piece of adhesive tape at the nare to allow easy visual inspection of tube positioning.
- Discard equipment, remove gloves and perform hand hygiene.
- Affix patient identification label to silastic tube with date and depth of insertion written on it. Confirm patient label with two staff members prior to attaching to patient.
- Document new OGT/NGT in eRIC, ensuring a scheduled task has been set in 4 weeks time.

3.2.2. Checking Tube Positioning

- Aspirate gastric placed silastic tube and check pH each time the tube is accessed for a feed or medication. Ensure pH ≤6 when checked.

- Use a 10 mL or 20 mL enteral feeding syringe to test pH as this creates less suction pressure on the tube and is less likely to cause issues with the silastic tube collapsing/compressing than smaller sized feeding syringes.
- Educate parents/ carers to continue aspirating and perform a pH check each time the gastric silastic tube is accessed whilst at home.

3.2.3. Accessing Tube for Feeding

- Verify feeding order.
- Collect equipment.
- Perform hand hygiene.
- Prepare feed volume as per medical order.
- Ensure feed is warmed prior to administration.
- Attach syringe to extension tubing (if required) and prime tubing with the feed.
- Ensure two nursing staff cross check correct patient and expiry of EHM or formula against patient identification and sign feed order on eRIC.
- Confirm tube placement as above. Ensure pH ≤6 before accessing for feeding.
- If unable to aspirate stomach content, do not apply force to tube. This is likely due to tip of the tube sitting above stomach content.
    - Place neonate on their left side for 5 minutes to allow movement and pooling of stomach contents, and then attempt aspiration again.
    - Visual inspection of line should involve checking centimetre and marking at nare or mouth (depending on oral or nasal insertion) and ensure that matches documented insertion depth.
- Attach enteral feeding syringe.
- Administer feed either via gravity feed or via feeding syringe pump as per order.
- Perform hand hygiene.

3.2.4 Accessing Tube for Medication Administration

- Verify medication order and perform all required medication checks.
- Perform hand hygiene and don non- sterile gloves (if required).
- Prepare and draw up medication as per Australasian Neonatal Medicines Formulary (ANMF).
- Confirm position of silastic gastric tube by performing gastric aspirate (perform gastric aspirate using same method as per checking tube positioning). Visual inspection of marking at nare should also be completed.
- Attach medication in oral feeding syringe to silastic tube.
- Slowly and gently push medication down gastric silastic tube, ensuring to monitor neonate's stability.
- Immediately stop pushing medication if neonate appears to be choking, gagging or cyanotic.
- Flush the tube with 1-2 mL of sterile water for injection after medication to prevent tube blocking.

3.3 Documentation

- eRIC

3.4 Education Notes

- Careful monitoring of neonates whilst receiving pump or gravity feeds should be attended to ensure tube dislodgement does not occur during feed process.
- Taping of gastric and transpyloric tubes should be regularly checked and assessed to ensure tube is secure.
- Regular assessment of nares for pressure injuries and skin integrity should occur.
- When the tube is inserted nasally, it is important to alternate between the nares to prevent skin breakdown[1].

3.5 Abbreviations

HITH	Hospital in the Home	EHM	Expressed Human Milk
CPAP	Continuous Positive Airway Pressure	OGT	Orogastric Tube
NGT	Nasogastric Tube	ANMF	Australasian Neonatal Medicines Formulary

3.6 Related Policies/procedures

- RHW NCC Nursing CBR - Intragastric Tube Insertion and Maintenance
- RHW NCC Nursing CBR - Continuous Enteral Feeding

3.7 References

1. Sigmon DF, An J. Nasogastric tube [Internet]. PubMed. Treasure Island (FL): StatPearls Publishing; 2022. Available from: https://www.ncbi.nlm.nih.gov/books/NBK556063/
2. The Sydney Children's Hospital Network Practice Guideline (2018) Enteral Feeding Tubes and the Administration of Enteral Nutrition

4 ABORIGINAL HEALTH IMPACT STATEMENT DOCUMENTATION

- Considerations for culturally safe and appropriate care provision have been made in the development of this Business Rule and will be accounted for in its implementation.
- When clinical risks are identified for an Aboriginal and/or Torres Strait Islander woman or family, they may require additional supports. This may include Aboriginal health professionals such as Aboriginal liaison officers, health workers or other culturally specific services

5 CULTURAL SUPPORT

- For a Culturally and Linguistically Diverse CALD woman, notify the nominated cross-cultural health worker during Monday to Friday business hours
- If the woman is from a non-English speaking background, call the interpreter service: NSW Ministry of Health Policy Directive PD2017 044-Interpreters Standard Procedures for Working with Health Care Interpreters.

6 NATIONAL STANDARDS

- Standard 2 Partnering with Consumers
- Standard 4 Medication Safety
- Standard 5 Comprehensive Care

7 REVISION AND APPROVAL HISTORY

Date	Revision No.	Author and Approval
15/10/2021	1	C. Walter (CNE)
21/10/2024 28.11.2024	2	E. Deibe (CNE/CNS) Endorsed by NCC CBR Committee
16.12.24	2	RHW BRGC