

LRI Children's Hospital

Administration of

- continuous or bolus feeds via pump
- bolus feed via gravity
- medicines

to a child/baby with a gastrostomy tube/PEG/Mickey button

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| Staff relevant to: | Nursing staff caring for children/babies within UHL Children's Hospital who have a gastrostomy tube fitted. |
| Team approval date: | January 2025 |
| Version: | V 6 |
| Revision due: | January 2028 |
| Written by: | Julia Martin & Sally Matthews. |
| Reviewed by: | Rachel Wade |
| Trust Ref: | C9/2010 |

1. Introduction and who this guideline applies to

To provide guidelines for nurses within the Children's Hospital on how to give a bolus feed, continuous feeds/bolus feeds via pump and/or medicines to a child/baby with a gastrostomy tube. It also applies to student nurses and student nursing associates under supervision.

This guideline needs to be used in conjunction with relevant infection control and consent policies to ensure the child receives safe care and children and families are able to understand the reasons for care to facilitate co-operation.

Related documents:

[Assessment of Administration of Medicines by Nurses and Midwives UHL Policy B13/2009](#)

[Enteral Feeding Post Gastrostomy Insertion UHL Childrens Hospital Guideline B24/2018](#)

[Leicestershire Medicines Code UHL Policy B60/2011](#)

2. Procedure / Process for administration of bolus feed via gravity and continuous feeds/bolus feeds via pump


| No | Action |
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| 2.1 | Liaise with surgical team and dieticians re- commencing use of gastrostomy following its insertion |
| 2.2 | Check dieticians prescription against feed to be administered All feeds (including expressed breast milk) should be checked with a qualified nurse |
| 2.3 | Select appropriate system according to whether bolus or continuous feed is being given: <ul style="list-style-type: none"> - kangaroo set (hospital use only) or 50mL syringe for bolus without pump - Ready-made feed pack/bottle plus giving set for continuous feed or bolus feed using pump. <p>N.B. Community do not supply Kangaroo sets , parents will be shown how to use 50mL syringes</p> |
| 2.4 | Aspirate gastrostomy prior to each use for the first 72 hours following insertion and also if child experiences any of the following at any time, as this may indicate displacement: <ul style="list-style-type: none"> - Diarrhoea and vomiting - Pain, tenderness, redness or swelling around the entry site - Obvious tugging of the tube <p>pH should be 5.5 or less on pH paper</p> |
| 2.5 | Attach appropriate extension line according to device in situ and flush with 3 to 10mL water prior to use. If tube appears blocked, liaise with medical staff or nurse in charge re suitable alternative to unblock tube. Amount of flush used should be administered under a dietician's guidance and correlated against child's fluid requirements and tube length. |

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| 2.6 | <p style="text-align: center;">BOLUS FEED</p> <ul style="list-style-type: none"> • Prime set with feed and clamp tubing prior to connection to gastrostomy. • Allow feed to flow in over a period of 15 to 20 minutes, topping up as needed. • Elevate feed set 10 to 20cm above abdominal wall. • Record amount and type of feed and time given on fluid balance chart. | <p style="text-align: center;">CONTINUOUS FEEDS OR BOLUS VIA PUMP</p> <ul style="list-style-type: none"> • Prime giving set with feed and clamp tubing prior to connection to gastrostomy. • EITHER: • - Decant 4 hours of feed into reservoir, label remainder and place in fridge for up to 24 hours, top up feed as necessary • OR • - If decanting is not needed i.e. Steriflow system, set up entire feed. • Check whether full feed regime is established and when a break (minimum 4 hours) is required. • Insert set into pump, switch on and set rate (ml/hr). Utilise limit volume setting if needed. • Students should always check settings with a qualified nurse. • Connect giving set to gastrostomy, press start and open clamps. • Check amount of feed given each hour and record on fluid balance chart. |
| 2.7 | Alter child's position where appropriate to achieve head and chest elevation to minimum of 30 degrees to reduce risk of reflux. | |
| 2.8 | On completion, discontinue. Flush, if required, should be administered under a dietician's guidance and correlated against child's fluid requirements and tube length. | |

3. Procedure/Process for Administration of Medicines via Gastrostomy Tube

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| 3.1 | Check prescription chart and medicine container as per UHL policy. Liaise with Pharmacist regarding suitability of tablets for use for gastrostomy and timing of medication. |
| 3.2 | Draw up medicines with enteral syringe. Crush and mix tablets with sterile water. |
| 3.3 | Flush tube with sterile water between and after medicines |
| 3.4 | Sign prescription chart following administration. |

4. General Principles

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| 4.1 | Observe child for signs of respiratory distress, coughing or vomiting during use of gastrostomy, stop procedure and seek help as needed. |
| 4.2 | On completion of feed/medicines, flush tube with 3-10mL of water or follow dieticians plan. Amount of flush used should be correlated against child's fluid requirements and tube length. Clamp off tube, remove extension line and cap off tube. Do not leave clamp closed on gastrostomy tube to reduce risk of tube damage. |
| 4.3 | Use a new set of disposable equipment for each feed/medicine prepared. Non-disposable extension lines should be cleaned with washing up solution, rinsed with clean water (sterile if immunosuppressed) and stored dry in a clean J tray. |
| 4.4 | Ensure parents are sent home with an initial supply of equipment on discharge and that they know how to obtain further equipment. |
| 4.5 |  <p>Ensure parents are made aware that if a child shows signs of tube displacement at any time</p> <ul style="list-style-type: none"> • dislodgement • bleeding • leakage of gastric contents |

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| | <ul style="list-style-type: none"> • signs of tube movement • pain • tenderness • redness • swelling at entry site • pain during or immediately following feed • vomiting • unable to test the pH level <p>STOP USING THE TUBE IMMEDIATELY AND CONTACT THE SURGEONS ON CALL OR THE CHILDRENS COLORECTAL SPECIALIST NURSES.</p> |
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4. Education and Training

Ward Staff 'In House Training'

Children's Colorectal Specialist Nurses

Teaching packs are available to teach staff and families

5. Monitoring Compliance

| What will be measured to monitor compliance | How will compliance be monitored | Monitoring Lead | Frequency | Reporting arrangements |
|--|---|--|------------------|---------------------------------|
| Patients have the appropriate gastrostomy care plan documented in notes. | Retrospective review of notes | Children's Colorectal Specialist Nurse | 3 yearly | Senior Children's Nursing Board |
| Appropriate actions followed if displacement is suspected | Incident review if reportable | Clinical risk team | As occurs | Quality & Safety Board |

6. Supporting References

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Dougherty L and Lister S eds (2004) The Royal Marsden Hospital Manual of Clinical Nursing Procedures Royal Marsden NHS Trust 6th edition Blackwell Science Oxford <http://www.rmmonline.co.uk/manual> (accessed 11/07/2017)

National Health Service (2003) Nasogastric and Gastrostomy Tube Feeding: for children being cared for in the community Best Practice Statement.

National Patient Safety Agency (2010) Rapid Response Report: Early detection of complications after gastrostomy. NPSA/2010/RRR010

Nursing & Midwifery Council (2015) Code of Professional Conduct NMC, London

Trigg E and Mohammed TA eds (2006) Practices in Children's Nursing. Guidelines for Hospital and Community 2nd edition Churchill Livingstone Edinburgh

7. Key Words

Gastrostomy, Bolus feeds, Medicines

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

| CONTACT AND REVIEW DETAILS | |
|---|--------------------------------------|
| Guideline Lead (Name and Title) Rachel Wade - Children's Colorectal Specialist Nurse | Executive Lead Chief Nurse |
| Details of Changes made during review: <ul style="list-style-type: none">- Clarified that it applies to Student Nurses and Student Nursing Associates under supervision- All feeds (including expressed breast milk) should be checked with a qualified nurse | |