CLINICAL GUIDELINE	
Medication Administration Intramuscular, Subcutaneous, Intravascular	
Scope (Staff):	Nursing and Medical Staff
Scope (Area):	NICU KEMH, NICU PCH, NETS WA

This document should be read in conjunction with this DISCLAIMER

This document should be read in conjuntion with Pharmacy's Medication Administration guideline.

All medications administered to a neonate are to be checked by two staff members who are deemed competent; taking into account the medication to be administered and the route of administration.

The person administering a medication (nurse/midwife/MO) is accountable for the safe administration of medications. This requires a sound knowledge of the use, action and usual dose, frequency of use, route of administration, precautions and adverse effects of the medications being administered.

Checking a Medication Order

The RN/EN/RM should check the medication order for completeness before administering a medication. This includes checking that the below are included on the medication order:

- The name of the medication to be administered
- The dose, frequency and times for administration
- The indication
- The route of administration
- The prescription date
- The prescriber's name and signature (must be legible/identifiable)

The 6 Rights

The six rights of safe medication administration outline the correct method of identifying that the correct patient is receiving the correct medication. The 6 Rights should be checked for every medication order:

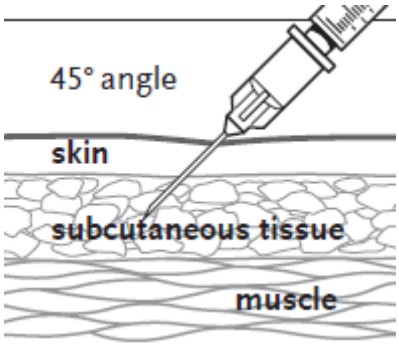
1. **Right patient**/individual (with 3 identifiers)
    - Check 3 identifiers (e.g. patient name, date of birth, UMRN)
2. **Right medication**
    - Name, strength and formulation
    - Ensure the above match the prescription with the label on the immediate container

- Check the expiry date and date opened (for oral medications).

3. **Right dose**
   - Ensure that an appropriate dose has been prescribed
   - Ensure the correct dose and form has been dispensed
   - Where a calculation is required, ensure two authorised health professionals perform an independent calculation
4. **Right route**
5. **Right time** (and date)
   - Ensure the timing and frequency of administration matches that charted
   - If the medication is give more than 30 minutes from the specified administration time, the time of administration should be recorded
6. **Right documentation**
   - Sign the medication chart
   - Document any deviations from the prescription in the patient's progress notes

Subcutaneous

1. Preferred site is the anterolateral thigh into the fatty tissue.
2. The volume should not exceed 1mL.
3. For repeat injections sites should be rotated or consider the use of an indwelling subcutaneous catheter eg Insuflon™.
4. Use aseptic technique.
5. For all subcutaneous injections a 25G, 16mm length needle should be used.
6. The angle of needle insertion should be at a 45° angle to the skin.
7. Use index finger and thumb to pinch up subcutaneous tissue to prevent injection into the muscle.



Equipment

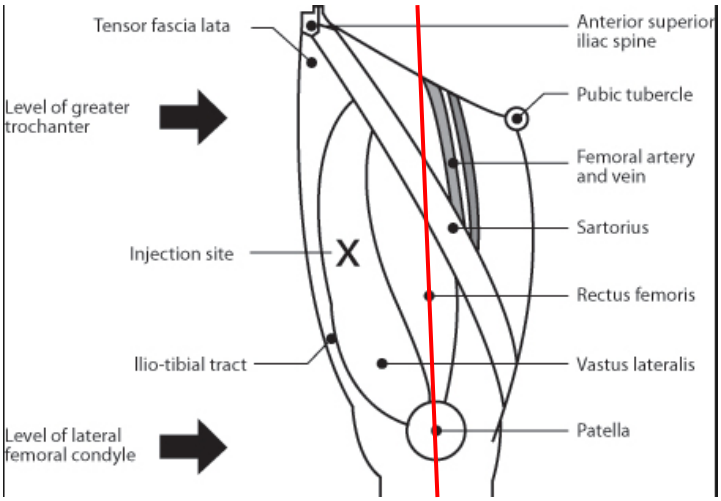
- 1% Chlorhexidine /Alcohol swab
- Cotton wool swab
- SC medication
- Gloves for standard precautions
- Neonatal medication chart / consent form
- Oral sucrose

Procedure

1. Make sure there is a written order on the neonatal medication chart MR811.
2. Check the correct drug/dose/time/route/patient.
3. Draw the medication up into the syringe using a large bore needle.
4. Change the needle to 25G/16mm needle.
5. Administer oral sucrose.
6. A second staff member may be needed to help position the infant. Consider swaddling the upper torso of the infant.
7. Undo the infant's nappy to access the anterolateral thigh.
8. Position the limb to relax the muscle.
9. Swab the area with chlorhexidine/alcohol swab – allow to dry before injection to reduce irritation of injection site.
10. Pierce the skin at an angle 45° to the skin.
11. Slowly inject the medication to minimise infant discomfort.
12. Remove the needle.
13. Apply pressure with cotton wool ball.
14. Observe site for local inflammation.
15. Dispose of sharps.
16. Complete documentation and sign medication chart.

Intramuscular

1. The anterolateral thigh is the preferred site for IM injection. Medications are injected into the bulkiest part of the vastus lateralis thigh muscle, which is the upper and middle thirds of the muscle.
2. The volume of the IMI should not exceed 1mL.
3. When two intramuscular injections are given, one injection should be given in the right thigh and the other injection should be given in the left thigh.
4. For all neonatal IMI administrations only use a 25 gauge and 16mm length needle.
5. The angle of needle insertion should be 90° to skin plane.
6. The nappy can be undone to ensure the injection site is completely exposed and to allow clear identification of anatomical sites.



Anatomical markers used to identify the vastus lateralis. Injection site (**X**)

Equipment

- 1% Chlorhexidine /Alcohol swab
- Cotton wool swab
- IM medication
- Gloves for standard precautions
- Neonatal medication chart / consent form
- Oral sucrose

Procedure

1. Make sure there is a written order on the neonatal medication chart MR811.
2. Check the correct drug/dose/time/route/patient.
3. Draw the medication up into the syringe using a large bore needle.
4. Change the needle to 25G/16mm needle.
5. Administer oral sucrose.
6. A second staff member may be needed to help position the infant. Consider swaddling the upper torso of the infant.
7. Undo the infant's nappy to locate the upper / middle thirds of the vastus lateralis thigh muscle.
8. Position the limb to relax the muscle.
9. Swab the area with chlorhexidine/alcohol swab – allow to dry before injection to reduce irritation of injection site. **Note:** Allow to dry as the alcohol may interfere with medication especially with vaccines.
10. Pierce the skin at an angle of 90° to the skin.
11. Slowly inject the medication to minimise infant discomfort.
12. Remove the needle.
13. Apply pressure with cotton wool ball
14. Observe site for local inflammation.
15. Dispose of sharps.
16. Complete documentation and sign medication chart.

Intravenous

- Use aseptic technique and follow standard infection control procedures for all cannula site care.
- Each connection provides a potential break in the line with subsequent contamination risk.
- The cannula and extension set must be secured and stabilised in a manner that does not interfere with accessing and monitoring of the site.
- If the cannula requires removal, scissors are not be used to remove the strapping.
- The cannula insertion site must not be enclosed in covering e.g. mittens, cloth wraps, swaddling

Equipment

- Blue tray
- 2%Chlorhexidine/alcohol swab
- IV medication
- Saline flush

Procedure

- Prepare and gather equipment.
- Clean tray.
- Clean hands
- Don gloves. Open equipment, checking expiry dates.
- Prepare the medication as per WNHS Neonatal Medication Protocols and label syringe/s.
- Confirm patient ID.
- If IV port is not exposed and/ or gloves are contaminated clean hand and re-glove.
- Scrub key part with 2% chlorhexidine/alcohol wipe for a total of 20 seconds. Allow to dry completely.
- Insert the normal saline filled syringe into the access port and flush with 0.5mL.
- While administering the medication and / or flush observe for:
- Resistance
- Pain
- Swelling or leaking around the insertion site
- If any of the above signs or symptoms occurs, cease administration and notify the Medical Officer.
- Remove the flush syringe and connect the medication syringe to the access port. Ensure that no air enters the system.
- Administer the medication at the specified rate following the recommended administration guidelines.
- After completion of the medication administration, attach the flush syringe and flush the line with 0.5mL 0.9% normal saline. The flush is to be given at the same rate as the medication to avoid rapid infusion of any medication that remains in the IV line/ cannula.
- Ensure that both clamps are in the closed position after all line access if a continuous infusion is not in progress.
- Discard equipment/
- Perform Hand Hygiene.
- Document and sign for medication/ flush.

Insuflon™ Subcutaneous Device

- Insuflon™ is an indwelling subcutaneous cannula that may be used to reduce the need for repeated injections of subcutaneous medications.
- An Insuflon can remain in place for up to 7 days.
- Refer to PCH Clinical Guideline – Subcutaneous Insuflon™ Catheter

Related CAHS internal policies, procedures and guidelines
Medication Administration

This document can be made available in alternative formats on request for a person with a disability.

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