

## Administration of flush and drugs via bolus injection through peripheral lines

Risk assessment of the patient environment prior to achieving Aseptic Non-Touch Technique:

- assess the procedure environment for any avoidable environmental clutter
- establish clear access of the patients IV cannula e.g. removing any blankets
- identify how many Key parts and Key sites are involved in administering flush and drugs via bolus injection

### Protocol for checking drugs

- All prescriptions are checked at the cotside (unless in Calton nursery or on the postnatal wards) by 2 registered nurses (both who have completed the NICU's IV Therapy for Neonates course) for accuracy in:
  - patient name, hospital number, weight and gestation,
  - drug to be given, route of administration, special instructions, legibility of the signature of the prescribing person,
  - date and time of current dose and
  - date and time of previous dose.
- The prescription should be checked against the drug monograph:
  - drug name,
  - dose (considering gestation, weight, actual age),
  - therapeutic monitoring level (check 'Antibiotic drug level' entry in baby's Badger notes if appropriate),
  - incompatibilities and reconstitution (if appropriate).
- For drugs where an Administration Prompt Chart is used e.g. for gentamicin/ vancomycin, this must be completed fully before proceeding to administering the medication
- Having independently calculated the dose and volume to be infused (in mLs/kg/dose and or rate/minute) the 2 nurses must confer and agree on the dose before proceeding.
- Both nurses must check that the drug is being infused into the correct line and there are no incompatibility concerns (see drug monograph). The prescription chart is signed by both nurses after administration is complete.

### Procedure for flush and medication preparation

#### Equipment

IV blue tray, non sterile gloves, white disposable apron.

Flush preparation: 21fg safety needle, 3mL IV syringe, alcohol swab, flush solution (usually Sodium Chloride 0.9%)

Drug preparation procedure depends on the drug (see monograph) but in general: 21fg safety needle, 3, 5 and or 10 mL IV syringe, water for injection, alcohol swab.

#### Procedure

- Cleanse hands according to the NNU policy.
- Prepare the IV blue tray (General Aseptic Field) at the cot space by cleaning it with a detergent/disinfectant cloth wiping front and back.
- Whilst tray is drying, equipment is collected and placed in an accessible position for carrying out the procedure.
- Cleanse hands according to the NNU policy.
- Apply non-sterile gloves and white apron.
- With another registered nurse check and complete the Administration Prompt Chart if appropriate
- Flush:
  - Assemble equipment; attach 21fg safety needle to the 3mL IV syringe protecting the Key Parts by using aseptic non-touch technique.

- Draw up approximately 1.5mL Sodium Chloride 0.9% into a 3mL IV syringe having first checked its suitability and expiry date.
- Dispel any excess until approximately 1.2mLs is left in the syringe.
- Close safety needle and place onto IV blue tray or back into the paper sleeve on the IV blue tray.
- Label as 'flush'.
- Drug:
  - Assemble equipment; attach 21fg safety needles to the appropriate sized IV syringes protecting the Key Parts by using aseptic non-touch technique
  - Draw up the correct volume of solution for reconstitution/dilution as appropriate for the drug being given (see monograph)  
Shake well to mix.
- If in Calton Nursery, the drug chart, administration prompt, medication and flush are checked and prepared on IV blue tray on the central island and then the prescription chart and IV blue tray are taken to cot side. The baby's name, hospital number and administration chart are checked again prior to administration of the medication.

### Drug administration

This method of administration applies to drugs prepared on the NNU whilst complying with Aseptic Non Touch Technique.

**Please remember - breaks in a line for the administration of drugs or flushes is a potential source of infection for the infant. Be particularly vigilant in hand washing, preparation of drug and cleaning the 'no-needle' port when administering drugs. Protect and identify Key Parts and Key Sites throughout procedure.**

- Vigorously scrub the 'no-needle' port/hub attached to the IV cannula with an alcohol swab for 30 seconds and allow to dry for 30 seconds. Using a non-touch technique throughout:
  - Insert the 3mL syringe into the port and twist to connect ensuring only Key Parts are touching. Flush the line with 0.5mLs of Sodium Chloride 0.9%. Disconnect the syringe and place it back onto IV blue tray or back into the paper sleeve on the IV blue tray.
  - Insert the syringe containing the drug into the no-needle port and twist to connect ensuring only Key Parts are touching.
  - Inject drug slowly according to the time specified in the drug monograph.
  - Disconnect syringe.
  - Insert the 3mL syringe with the Sodium Chloride 0.9% into the port and twist to connect.
  - Flush the line with 0.5mL Sodium Chloride 0.9%. Remove the syringe.
  - Clean no-needle port/hub for 30 seconds after delivering the drug/flush.
- Discard sharps and equipment safely as per NNU policy
- Clean the IV blue tray after use with a detergent cloth from front to back.
- Remove gloves and apron.
- Clean hands immediately as per NNU policy.