

Title:	Guideline for skin preparation in the neonatal unit. (Cheshire & Merseyside Guideline)
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Guideline for skin preparation of the newborn on the neonatal unit.

Purpose

This guideline describes the method of skin preparation prior to invasive procedures on neonatal inpatients when on the neonatal unit.

Background

Pratt et al (2007) state that 'approximately 3 in 1000 patients admitted to hospital in the UK acquire a bloodstream infection, a third of which are related to central venous access devices'. Bloodstream infections associated with central venous access devices are among the most dangerous complications of healthcare.

The solution recommended for decontamination of the skin prior to the insertion of a vascular device is Chlorhexidine gluconate (CHG). This is a broad –spectrum antiseptic effective against a wide range of gram positive and gram negative bacteria. The use of CHG has the potential to reduce hospital acquired infection however, there are safety concerns relating to skin compromise resulting in burns, therefore caution should be taken when applying the product. (Hart, 2007, Pratt et al, 2007, Loveday et al, 2014).

Indication

- Invasive procedures
 - Umbilical venous catheter insertion
 - Umbilical arterial catheter insertion.
 - Percutaneously inserted central catheters (long lines)
 - Lumbar Punctures
 - Peripheral arterial access.
 - Broviac line dressing changes
 - Ventricular tap
 - Peripheral venous cannulations
- Non invasive procedure
 - Sterile dressing changes

Clinical Application

NB: on neonatal unit only

<27⁺⁰ weeks and or <1 Kg		>27⁺⁰ weeks and or >1 Kg from birth
within the first week of life	after the 1 st week of life,	
Aqueous Chlorhexidine 0.05% chlorhexidine gluconate (Unisept)	Chlorhexidine Gluconate solution 0.5% in 70% alcohol (Hydrex)	Chlorhexidine Gluconate solution 0.5% in 70% alcohol (Hydrex)

Application technique on the neonatal unit

- Pick up sterile gauze with forceps or gloved hands
- Soak gauze in Unisept or Hydrex as indicated above
- Ensure the gauze is thoroughly wrung out
- Apply skin preparation undiluted to skin using gauze
- Do not allow the solution to pool.
- Change the sterile drape immediately if any soakage is noted.
- Allow solution to dry for 30 seconds prior to commencing procedure.
- Once the procedure is completed, any exposed skin previously decontaminated should be cleaned with sterile water. This should be done before applying any secure dressing

Delivery suite, postnatal ward and transitional care.

Use Chlorhexidine Gluconate 2% in 70% alcohol.

- From 34 weeks to 2 months of age, a dabbing action should be used.
- From two months of age onwards, use up, down, back and forth strokes.

Surgical theatre

Local policy will guide skin preparation in theatre prior to surgical procedures.

Non-technical aspects

- Any member of staff observing incorrect practice should request the procedure is aborted and seek senior advice.
- Any problem during application should be documented in health care records e.g. if there is a delay in noticing any soakage.
- Any chemical burn should be documented in health care records and an incident form completed. Wound care protocol should then be adhered to.

References

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