SARASOTA MEMORIAL HOSPITAL

NURSING PROCEDURE

TITLE: SKIN CARE PROTOCOL FOR THE VERY LOW BIRTH WEIGHT INFANT (nur26)

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ISSUED FOR: Nursing
RESPONSIBILITY: RN, LPN – NICU

PURPOSE: To maintain skin integrity in the very low birth weight infant.

PROCEDURE: Skin Care Upon Admission:

1. Take pre-warmed Giraffe to OR and admit infant directly to the Giraffe.

2. Place baby on prewarmed gel mattress covered by thin blanket, pushing gel down to hollow out a nest.

3. If infant's skin is friable and/or infant is less than 25-week gestation, consider using a Telfa Blanket to prevent skin tears, and skin from adhering to linens. Change when soiled, after bath or as needed.

4. Provide >60-70% relative humidity for infants <30 weeks or <1200 g within first hour of admission. Nurse may request >70% humidity in extremely low birthweight infants. High humidity reduces transient evaporative water loss (TEWL) and evaporative heat loss resulting in improved temperature stability.

5. May bathe with warmed sterile water when vital signs stable and thermoregulation is established.
   a. Use standard precautions
   b. Gently clean skin surfaces with warm sterile water only during 1st. week of life. Avoid rubbing; use soft materials eg. Cotton balls: squeeze water onto the skin during rinsing.
   c. Use warm sterile water when areas of skin breakdown are evident.
   d. Do not remove vernix from the skin.

6. Transparent adhesive dressing may be used to cover bony prominences. Do not cover monilial rash. Use smaller pieces to avoid completely encircling extremity.

NOTE: DO NOT REMOVE TRANSPARENT ADHESIVE DRESSING ONCE IT IS IN PLACE

   a. Transparent adhesive dressing provides protection for skin during handling.
PROCEDURE (cont’d)

b. Transparent adhesive dressing greatly decreases insensible water loss.

c. Transparent adhesive dressing helps stabilize electrolytes by decreasing tissue trauma and limiting ISWL (insensible water loss).

7. With MD order an emollient (Aquaphor) may be applied gently and sparingly to areas not protected by transparent adhesive dressing. Apply gently every 12 hours or as needed. Do not apply to face or head. Do not apply over monilial rash. Aquaphor may be used with Phototherapy.

8. Use a piece of baby-tape on pulse ox probe before applying probe to baby.

9. Use duoderm to hold temperature servo probe in place, and cover with a reflective disk. Change site every 12-24 hours. Baby tape and other hydrogel products tend to slip off the immature skin and result in hyperthermia.

Maintaining Skin Integrity:

1. Always keep in mind that intact skin is the infant’s best defense against a life threatening infection.

2. Limit the amount of adhesive tape used to secure monitoring and life support devices.

3. Use a barrier between skin and tape to secure ETT, NC, and OG/NG tubes.

4. Use duoderm or Bioclusive under ETT tape.

5. Use double back tape when possible

6. Consider omitting ECG electrodes for the first few days; use the UAC and pulse ox to monitor HR. Be sure alarms are set appropriately and a written order is on the chart to omit leads. If the baby has a problem with high K+, it may be necessary to use electrodes to monitor T-waves. (Large peaked T-waves indicate cardiac consequences of high serum K+).

7. Trim electrode pads to minimize skin exposure.

8. Prevent Epidermal stripping (skin is maturing and growing, so handling, removing tape etc., pulls the newly formed skin apart).

   a. Avoid alcohol containing plasticized polymers (Bard Skin Prep). They may be ineffective in preventing skin trauma and effects of absorption are unknown.

   b. Avoid adhesive removers (Detachol, Whisk,
PROCEDURE (cont’d)

Demosol, and Unisolve). They are drying to the skin, combustible and the effects of absorption are unknown.

c. Remove adhesives slowly and gently in a horizontal plane that is parallel to skin surface with water soaked cotton balls, mineral oil, or Aquaphor.

d. Benzoin and/or Mastisol are not recommended for routine use. They can provide a stronger bond between tape and epidermis than the epidermis and the dermis in the preterm skin. When removed, an entire epidermal layer may be removed. Application of adhesives should be avoided whenever possible.

e. DO NOT use biliblanket with infants less than 25 weeks it may cause skin injury.

f. Heated moist tubing or heated mattress should be covered with a blanket. Direct contact may result in burns.

g. Humidity is to be used until infant is 30-32 weeks post conceptual age. After first week of life gradually decrease relative humidity to 50% and keep at 50% until infant is 28 days old. Two to three days before the discontinuation of humidity, wean by 5-10% every 12 hours while monitoring infant’s temperature.

h. Infants that are born less than 26 weeks gestation may require 50% humidity past 28 days of life. They may not have mature skin barrier function until 30-32 weeks post conceptual age.

Antiseptic Solutions:

1. Apply 2% Chlorhexidine before all invasive procedures. Allow 2% chlorhexidine solution to remain on skin surface for a full 30 seconds prior to procedure.

2. Allow solution to dry for at least 30 seconds, after procedure is completed remove chlorhexidine solution completely with sterile water or sterile NS, wiping two times (these products may cause chemical burns if not removed).

Treating Skin Breakdown:

1. Cleanse affected area using body temperature normal saline diluted 1:1 with sterile water every 4-8 hours.

2. Use antifungal ointment for fungal rashes and breakdown.

3. Use Bioclusive to cover non-infected breakdowns.

4. Silvadene is not recommended for neonates because of the
risk of kernicterus caused by sulfur competing with bilirubin for binding with albumin. It is contraindicated in premature or newborn infants up to 2 months of age.

5. Notify MD and obtain skin cultures and gram stains from any suspicious skin breakdowns.

**DOCUMENTATION:**

Document on EMR interventions and infant’s reaction to treatment and consider it a high priority problem in the Care Plan.

Complete skin assessment utilizing neonatal skin condition score every shift and PRN. Document the score in SCM.

**REFERENCE:**


**REVIEWING AUTHOR (S):**

Heike S. Bucken RNC-NIC, CLC, NICU Clinical Coordinator
Lisa Biach, RNC-NIC, CBC, BSN, Neonatal Family Case Coordinator