Recommended Care of Neonates with Suspected EB

Precautions

Procedure	Action	Rationale	Comments
ECG monitoring/oxygen saturation monitoring Only if monitoring is essential	Stick electrodes to the skin, or to Mepitel One [®] .	Avoid damage to the skin.	Only remove if SMAR (Silicone medical adhesive remover e.g. Niltac) is available.
Venepuncture – only if essential	Avoid use of tourniquet or glove. Squeeze limb firmly, avoiding shearing forces. Avoid excess skin rubbing.	To minimise skin trauma.	Wrap dressing material around limb prior to squeezing.

Reference: Denyer J, Pillay E, Best Practice Guidelines for skin and wound care in Epidermolysis Bullosa, international Consensus DEBRA 2012

Action	Rationale
Remove baby from incubator, unless prescribed for other medical conditions such as prematurity.	Heat and humidity exacerbate blistering.
At birth, use commercial plastic cling film as a temporary dressing for example, whilst waiting for the dermatology and neonatal consultation.	Other materials, such as towels may stick to the damaged skin.
Avoid attaching plastic hospital ID tags directly to a limb. ² Attaching to clothing or cot is preferred.	The rubbing will create blistering and trauma.
Remove cord clamp in newborns and replace with ligature. ¹	To prevent trauma to umbilical area.
Ensure adequate pain relief has been given to the baby prior to skin care, dressing changes and intervention. ^{1,2}	Dressing changes and handing can be painful and traumatic.
Wash hands prior to applying gloves and administering skin care. Non-touch/clean technique is accepted practice, rather than aseptic technique.	To prevent skin infections.
Wet the gloved fingertips with water or saline or apply 50% liquid paraffin and 50% soft paraffin (Dermeze) to the fingertips.	To prevent fingers sticking to dressings or the skin.
Avoid bathing in the first few weeks of life until prenatal and birth trauma has healed. Dressing changes can be done one limb at a time to avoid trauma. Warm saline can be used to irrigate dressings off, if required.	Allows time for healing of damage present at birth. Movement, handling and kicking will cause further trauma.

Action	Rationale	
Use a sterile hypodermic needle to lance the blisters. Compress with gauze and expel the liquid. Leave the roof of the blister intact. Cornflour can help dry up the blisters. Do not sprinkle on open wounds.	Blisters will extend if left. The blister roof will facilitate healing and comfort.	
Dress infant's fingers and toes individually if there is skin loss. ²	To avoid digital fusion of open wounds.	
Avoid applying any adhesive dressings or tapes. Use non-adherent silicone tape for securing IV lines and NG tubes (Mepiform / Mepifilm).	Encourage oral feeding, avoid using IV lines if possible (risk of sepsis). Any adhesive dressing or tape will cause trauma.	
Cleanse the nappy area with 50% liquid paraffin, 50% white soft paraffin (Dermeze) Avoid nappy wipes.	To ensure cleansing without trauma. To reduce pain.	
Line nappy with soft nappy liner or a liner cut from polar fleece. Example:	To prevent blistering from the edges of nappy.	
A hydrogel impregnated dressing can be applied to the nappy and groin area if there are any wounds or raw areas. ^{2,3}	Soothing, conformable and healing.	
Wherever possible, nurse the baby in a cot laying the child on a soft pad or neonatal incubator mattress ¹ . When lifting place arms underneath the pad and lift this together with the child. If it is necessary to directly lift: place your hands behind the infant's head and underneath the buttocks and allow the infant to roll back onto your hands and lift. Never lift a baby from underneath the arms. ³	Lifting the child on a soft pad will avoid friction and shearing forces from carers hands, which will cause blisters and skin loss.	
Dress babies in loose jumpsuits turned inside out. ³	Naked babies with EB tend to cause damage to their skin by kicking their legs together. An inside out jump suit prevents friction against the seams.	
For infant feeding, use a Pigeon cleft palate bottle if not breast fed. 1,2	To avoid friction damage to underside of nose and oral mucosa	
Protect lips with 50% liquid paraffin, 50% white soft paraffin.	To avoid the teat sticking to the lips.	

References: 1. Atherton D, Denyer, J Epidermolysis Bullosa: an outline for Professionals. Adapted from the Chapter Epidermolysis Bullosa written for Textbook of Paediatric Dermatology, edited by Harper J I, Oranje AP and Prose N S 2003. 2. Denyer J, Pillay E, Best Practice Guidelines for skin and wound care in Epidermolysis Bullosa, international Consensus DEBRA 2012. 3. Denyer J Wound Management for Children with Epidermolysis Bullosa Dermatologic Clinics 2012 Part 2 April 2010; Vol 28 (2): 257-264



Recommended Dressings for Neonates with EB

Dressing type	Brand	Indications	Comments/ Contraindications	Wear time
Hydrogel impregnated gauze	Intrasite Conformable [™]	Wounds/ blister sites in nappy area. Can be used over nappy cream such as Bepanthen.	Small neonates at risk of hypothermia.	Change when dry. May need primary contact layer.
Lipido-colloid	Urgotul [®]	Wound contact layer	Can be difficult to retain.	Change every 3-4 days.
Soft silicone mesh	Mepitel [®]	Wound contact layer		Change every 3-4 days.
Soft silicone foam	Mepilex®/ Mepilex lite®/ Mepilex® Transfer	Protection/Absorption/ Secondary dressing	Use as a secondary dressing over primary layer of soft silicone lipido-colloid mesh to prevent adherence. Caution in very fragile skin.	As determined by exudate level.
Polymeric Membrane	Polymem [®]	First choice dressing for severe neonatal wounding or critical colonization/infection	Change when wet to avoid hypothermia.	As determined by exudate level.

Reference: Denyer J, Pillay E, Best Practice Guidelines for skin and wound care in Epidermolysis Bullosa, international Consensus DEBRA 2012