

Skin Care Recommendations for Skin Erosions

(Editor's Note: The following recommendations resulted from our AEC Conferences held in 2003 and 2006. AEC syndrome has been called Hay-Wells syndrome or Rapp Hodgkin syndrome in the past.) These recommendations are based on limited, collective experience, rather than evidence-based data. Treatment failure may still occur.

Caring for Babies With Erosions

Although case reports suggest that the eroded skin of AEC newborns often normalizes within the first weeks of life, several infants presented at these conferences had chronic wounds complicated by life-threatening infections that healed with significant atrophic scarring. The challenge of caring for neonates with extensive erosions includes minimizing the very high risks of percutaneous infection and toxicity.

What Works

- Daily bathing with gentle cotton swab debridement may be performed, as tolerated, with plain water, diluted bleach or chlorhexidine.
- Pretreatment analgesia may be required.
- Safe and readily available wound care materials include plain petroleum jelly and Vaseline Gauze, which should be dispensed from single-use containers.
- Infants with severe erosions may benefit from isolette care with additionally supplied water vapor to maintain high ambient humidity.
- Severely affected infants will require long-term hospitalization and careful monitoring for secondary infections with a variety of organisms, including gram positive bacteria, gram negative bacteria, and yeast.
- Extended home nursing care may be required on discharge.
- Avoid any irritants or potential causes of inflammation.
- A very dilute "Dakin solution" (0.025% hypochloride solution) was suggested between dressing changes.

What Doesn't Work

- Extensive wound debridement and traditional skin grafting or artificial skin replacements were not successful for the



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- infants in this series.
- Punch or pinch grafting was suggested as a possible alternative; no experience with these techniques in AEC exists.

Erosions in Older Children

For older children, major issues include time requirement for wound and skin care, pruritus, and pain control. The risks of secondary infection are lower than for infants. A high index of suspicion for secondary infection must be balanced with restrained use of empiric antimicrobial therapy. Maintaining a healthy skin barrier is the safest way to avoid cutaneous infection.

Positive skin cultures, accompanied by diagnostic signs of increasing pain, redness, swelling, and constitutional symptoms, are best treated as specifically as possible. It was suggested that a risk-benefit assessment may support a trial of doxycycline in children under the age of 8 with unremitting scalp erosions, despite the risk of dental staining.

The content of this document is for informational purposes only. Questions regarding specific patient issues should be directed to the appropriate professionals for resolution.

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