

Toxic Epidermal Necrolysis in Pediatrics: The Fundamental Role of the Nurse in Specialized Wound Care

Tatiana do Carmo Froes Moraes and Thais Brito Anastácio Figueiredo
Hospital Femina – Cuiabá – MT - Brazil

Introduction:

Toxic epidermal necrolysis (TEN) is a rare and potentially fatal condition, usually triggered by adverse drug reactions. Given the severity of the lesions and associated complications, the nursing role is essential in the assessment, selection, and application of appropriate dressings, significantly contributing to therapeutic success.

Objective:

To report the care experience of a child with TEN, using a specialized therapeutic plan with antimicrobial and anti-inflammatory dressings prescribed and applied by the nursing team.

Methods:

This is a descriptive case study involving a 5-year-old child diagnosed with autism spectrum disorder and epilepsy, admitted to the ICU after an adverse reaction to valproic acid. After evaluating the skin lesions, a care protocol was implemented based on current wound care guidelines. The selected materials included 0.1% polyhexanide (PHMB) solution for cleansing, tea tree and copaiba oil gel, rayon gauze with the same oils, and tubular mesh. Dressing changes were performed every 72 hours, with photographic and descriptive records maintained over a 10-day treatment period.



Figure 1



Figure 2



Figure 3

Figure 1 e 2 - Pre-treatment image showing lesion extent before wound care intervention.

Figure 3 - Post-treatment image showing significant lesion improvement following wound care protocol.

Case report:

The nurse plays a highly significant role in specialized care, particularly in selecting the appropriate dressing for wound treatment. In this specific case, the treatment was carried out as follows:

- **Start of Treatment:** Implementation of a protocol based on current wound care guidelines; Wound cleansing using 0.1% polyhexanide biguanide (PHMB) solution.
- **Application of Dressings:** Use of rayon gauze and tea tree and copaiba oil gel as primary dressings; Occlusion with sterile gauze; Fixation with tubular mesh, ensuring stability and comfort.
- **Treatment Period:** 10 days - Dressing changes every 72 hours, with photographic and descriptive documentation of progress.
- **Progress Observed During Treatment:** Gradual improvement of lesions noted at each dressing change;
- **Clinical Results and Identified Benefits:** 1st – Infection prevention: due to the antimicrobial properties of 0.1% PHMB and tea tree/copaiba gel; 2nd – Pain reduction: promoted by the gentle and therapeutic properties of the dressings; 3rd – Atraumatic dressing changes: rayon gauze and tubular mesh minimized pain and trauma during removal; 4th – Cost reduction: through the use of effective, accessible materials that helped avoid complications and prolonged care.

Conclusion:

Nursing care was essential for the child's recovery, particularly in selecting appropriate dressings and implementing an effective treatment plan. The specialized approach and continuous documentation enabled monitoring of clinical progress and prevention of complications. This case highlights that combining targeted dressings with skilled nursing care can significantly contribute to therapeutic success in pediatric TEN cases.