

Infantile atopic dermatitis: Considerations for management of paediatric hand burns

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Skilled burn care is both an art and a science. It requires the clinical application of systemised knowledge, founded upon scientific method to identify, intervene and optimise outcomes of burn wound recovery. Clinical competency is a keystone to the art and science of quality burn care. Timely and accurate identification of co-morbid diagnoses, which may potentially compromise burn care, is indicative of a fundamental core clinical competency. An example of a diagnosis with the potential to significantly impact upon paediatric burn wound healing is *infantile atopic dermatitis*.

Infantile atopic dermatitis is a Type 1 IgE-mediated hypersensitivity reaction characterised by xerosis and pruritis. Evidence suggests an increasing prevalence in children aged from birth to 2 years of age. One feature of infantile atopic dermatitis, relevant to burn wound management, relates to a genetic mutation of the filaggrin gene, whereby an absent copy impairs a child's ability to repair damage to the epidermis, thereby leaving them susceptible to wound contamination, infection and delayed healing.

This presentation depicts the case study of a 14-month-old child who sustained full thickness contact burns to bilateral palms after touching a glass fronted wood combustion heater. It illustrates how a-typical skin may respond when burn wound management fails to recognize the effect of infantile atopic dermatitis upon wound healing, resulting in graft loss, and the consequential impact upon activity engagement and quality of life.

Quality paediatric burn care should consider potential deleterious effects of comorbid diagnoses such as infantile atopic dermatitis. The artful skill of burn clinician identification of relevant comorbid pathophysiology consequently supports the science of optimal wound recovery and minimization of problematic scar development.

Key Words

Paediatric Hand Burns, Atopic Dermatitis, Wound Healing, Clinician Competency

Nominated Stream for Poster Presentations

Care

Prevention

Research