

# BBA Clinical Practice Guideline for Management of Burn Blisters

BBA recommendations are formulated from the best available evidence for burn blister management in order to provide guidance for healthcare professionals working in pre-hospital, emergency, primary or secondary services, expected to manage patients with burn blisters.

All burn injuries that fall within the National Burn Care Referral Guidance should be discussed with the local Burn Service

## Burn blisters

Burn blisters occur as a response to a burn injury whereby increased capillary permeability results in oedema formation that separates the epidermis from the underlying dermis. Burn blisters occur primarily in superficial partial thickness burns but also may overlay deeper burns.

### Criteria for deroofing

<b>LEAVE INTACT</b>	<b>Small non-tense blisters</b> ( $<6$ mm)	Natural method of pain control. Unlikely to rupture spontaneously, damage underlying tissue, or impede healing
	Deroofing is not the priority in care for severe and extensive burns.	
<b>DEROOF</b>	<b>Thick-walled blisters</b> on fingertips, palms and soles of feet	Blisters on these areas are associated with discomfort and limited mobility. Alternative management is to cut a sizeable "window" to remove fluid and enable assessment of the wound
	<b>Large</b> ( $>6$ mm) and <b>thin-walled blisters</b>	Most likely to occur on hair-lined surfaces and rupture spontaneously, which increases the risk of infection
	<b>Ruptured blisters</b> and <b>loose skin</b>	Removes any necrotic and possibly contaminated material from the wound

### Rationale for deroofing

- ✓ Allows proper observation of the wound bed and accurate assessment of the burn depth, including capillary refill time and sensation, to determine appropriate treatment
- ✓ Removes non-viable tissue from the wound bed, allowing faster wound healing and decreasing likelihood of scarring
- ✓ Evacuates blister fluid that may suppress local and systemic immune function, improving the patient's ability to defend against infection
- ✓ Reduces the risk of wound infection associated with uncontrolled blister rupture and prolonged presence of non-viable tissue
- ✓ Prevents pressure on underlying tissue, preserving the wound microcirculation and preventing the burn depth progression
- ✓ Enables movement of joints, reducing the likelihood of burn contracture
- ✓ Improves the efficacy of topical wound therapy

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