Thermal Burn Injuries

REFERENCE

Collapse all

Guideline Type: Clinical Guidelines

Keywords: Urgent Care Handbook; Skin

Clinicians should be aware that burns are complex injuries that will vary in depth, severity, and cause. This guidance refers specifically to minor and moderate burns of a thermal nature. For guidance on managing burns of any other nature consider contacting the CCP Desk or PP desk for further advice. Simple first-aid management steps are essential in the initial stages of burn injury (up to 3 hours) and should be provided at the earliest opportunity and only at the expense of life-threatening emergencies. These principles focus on stopping the burning process, cooling the injury, covering the wound, and managing the patient's pain.
Modern burn-gel dressings are no longer carried by SECAmb, there is limited evidence for their utility in cooling burns and tepid running water remains the superior management option. Burn not requiring ED conveyance may be suitable for PP referrals. It is important to consider that any burns presenting with skin loss or blistering is considered to be at least superficial partial thickness and require further assessment/dressing by an appropriate HCP such as PP, GP, NP or A&E with a 48 hour follow up. The severity of the patient's presentation and service availability will determine whether the patient requires treatment in A&E

Symptoms, Signs and Circumstances

Patients with any of the following symptoms are likely to have poorer healing outcomes and will require referral to the local burn service. These patients will require conveyance to A&E.

All burns >2% TBSAB in children

All burns > 3% TBSAS in adults

All deep dermal and full thickness burns

All circumferential burns

Any burn not healed in two weeks

Any burn with suspicion on NAI

All burns to hands, feet, face, perineum, and genitalia

Any chemical burn

Electrical burns

Friction Burns

Cold burn injuries

Any concerns for healing due to comorbidities.

Red Flags and Cautions

Patients presenting with the red flag symptoms and recent history of burn, regardless of size, may be at risk of toxic shock syndrome (particularly in children) and require emergency hospital management.

Temperature >38.9 degrees C

Rash

Diarrhoea and vomiting

General malaise

Not eating or drinking

Tachycardia/tachypnoea

Hypotension

Reduces urine output

Referral Management

PPs may be able to provide advanced wound care for burn injuries suitable to be left at home. They can also refer patients directly to the local burn service if they meet the following criteria:

<4% TBSAB

>18 months

The burn does NOT involve the face or perineum

There is NO restriction of circulation

There is NO smoke inhalation

There is no evidence of new cardiac arrythmia

Treatment

Remove, nappies, clothing, and jewellery near the burned area (unless adhered to skin).

Minimum of 20 minutes of cooling with tepid running water (can be beneficial up to 3 hours after the injury.

Gentle removal of any topical remedies applied prior to arrival.

Do not apply ice to the burn.

The use of burn-gel dressings is not supported by evidence and SECAmb no longer carry this equipment.

In the absence of running water use cool compresses regularly changed for 20 minutes.

Cover with layered clingfilm, do no wrap circumferentially

Provide adequate analgesia.

References

Battaloglu E, Greasley L, Leon-Villapalos J et al (2016). Faculty of Pre-Hospital Care and British Burn Association Expert Consensus Meeting: Management of Burns in Pre-Hospital Trauma Care. Available at: https://fphc.rcsed.ac.uk/media/2621/burns-consensus-2019.pdfBritish Burn Association (BBA) (2018). First Aid Clinical Practice Guidelines. London: BBA. Available at: https://www.britishburnassociation.org/wp-content/uploads/2017/06/BBA-First-Aid-Guideline-24.7.18.pdfLondon and South East Burns Network (LSEBN) (2018) Initial management of burn wounds. Available at: https://www.lsebn.nhs.uk/website/X13911/files/LSEBN%20Initial%20management%20of%20burns.pdfLSEBN (2017)
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Version: 2.0

SEC0490 - Version 1.110