



ANZBA Use of hydrogels consensus statement

Background

Hydrogel dressings

- Hydrogel dressings have been introduced for the acute management of burn injuries.
- They are designed to provide cooling of the wound and a dressing function.
- Evidence that the cooling function of hydrogel dressing products is as effective as cool running water for first aid is lacking

First Aid for Burns

- The gold standard for burns first aid is 20 minutes of cool running water applied to the burn as soon as possible (within 1 hour and up to 3 hours) after injury.
- This is especially applicable to partial thickness wounds, where cooling may decrease burn wound progression and improve healing

Dressings

After first aid and wound cleaning, burn wounds should be dressed with appropriate sterile dressings.

Analgesia

- Cool moist dressings provide good analgesia for partial thickness burns
- Moist dressings rely on exposure to air for their cooling effect via evaporative heat loss
- This is helpful for small burns (<10% Total Body Surface Area TBSA) in the first few hours after injury, but in patients with more extensive injury, may result in hypothermia.

Hypothermia

- Prolonged cooling of extensive burn wounds (>20%TBSA in adults and >10 - 15%TBSA in children) can cause hypothermia - especially in children and the elderly.
- Hydrogel or any wet dressing can also be associated with development of hypothermia if exposed to the air and left in place for prolonged periods
- Cooling should be discontinued if hypothermia develops.
- The prolonged use of hydrogel dressings in the elderly or children with larger burns may cause hypothermia, and should be avoided.

Statement

- The gold standard for burns first aid is 20 minutes of cool clean running water
- *If clean running water is not available*, immersion in cool water, application of wet towels or hydrogel or other wet dressings may be useful alternatives for the provision of first aid and analgesia.
- The patient must be kept warm during cooling of the burn wound
- After first aid, patients with large burns should be wrapped in dressings that minimize evaporative heat loss by excluding air from the wound and the outer surface of the dressing.
- For transfer to hospital, plastic cling films are suitable if dressings are not available.

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