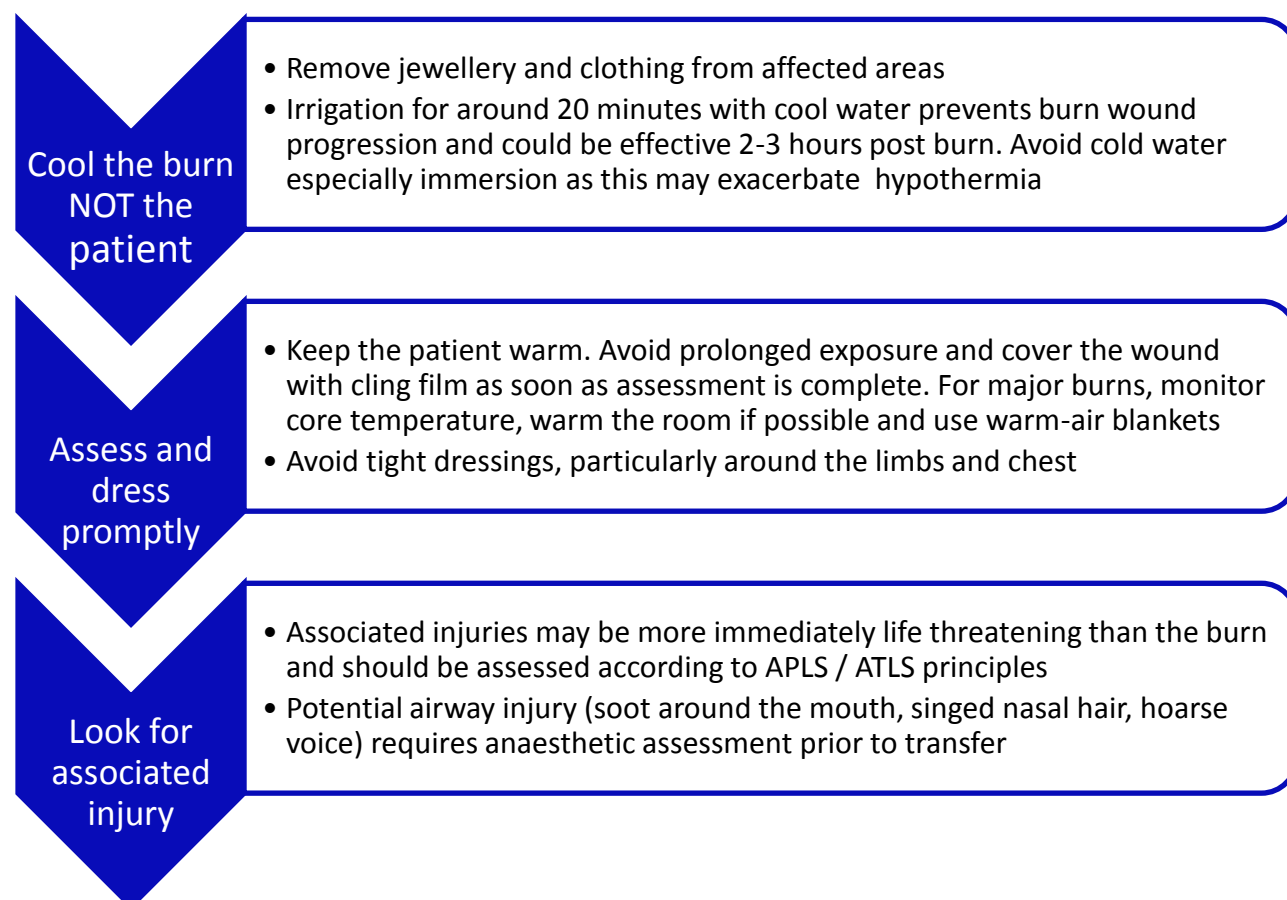


14. Burns – initial management and referral criteria

First aid



Management

Calculate and document Total Burn Surface Area (TBSA) and depth using a [paediatric Lund and Browder Chart – Appendix 8](#)

Less than 10% TBSA	No fluid resuscitation if oral intake is adequate
10% or more TBSA	Calculate resuscitation fluid requirements using the modified Parkland formula

Parkland formula

$$\text{Fluid volume (ml)} = \text{weight (kg)} \times \text{TBSA} \times 3$$

Divide total calculated fluid volume by two and then:

- Complete the first half by 8 hours **from the time of the burn**
- Give the second half over the next 16 hours

Give Hartmann's solution (preferred) or 0.9% Sodium Chloride for resuscitation. Additional maintenance fluids should be given +/- Potassium Chloride.

Other priorities

- Application of a dressing helps with pain but additional analgesia is usually required
- Does the patient require tetanus prophylaxis?
- Avoid prophylactic antibiotics unless otherwise indicated

Don't forget
analgesia

Referral criteria

Children with a burn **and** other life-threatening injuries should be transferred to the nearest Children's MTC.

Refer to a Burns Unit if:

- **Age < 6 months**
- **Non-accidental** (also refer to the local paediatric team)
- **Special area** – face, hands, feet, perineum, flexures
- **Circumferential** burn
- Any thickness burn of **2% or more Total Body Surface Area (TBSA)**
- Any **full thickness burn** greater than the size of the patient's fingertip
- Significant **inhalational injury**
- **Chemical, radiation, electrical or friction burn** and any **cold injury**
- Any **unwell or febrile child** with a burn
- Any child with a suspicion of **toxic shock syndrome**
- Any burn that has **not healed at 14 days**

Discuss potential
referrals with on
call registrar
at local burns
unit before
regional transfer

In the Leeds Children's MTC region burns care is co-ordinated from the Burns Unit at Pinderfields via Plastic Surgery Registrar on 0844 811 8110.

In the Sheffield Children's MTC region burns care is co-ordinated from the Burns Unit at Sheffield Children's Hospital (SCH). The Plastic Surgery Registrar on-call should be contacted Mon-Fri 0800-1600 via SCH on 0114 271 7000 and out of hours via Northern General Hospital on 0114 243 4343.

Patients requiring HDU or PICU level care should be referred

via Embrace on 0845 147 247 2

<https://www.embrace.sch.nhs.uk>

Appendix 8 - Paediatric Lund and Browder chart

