

St Andrews Centre (Chelmsford)
Adults **0300 44 30475**
Children **0300 44 30405**

Chelsea & Westminster Hospital (London)
Adults **020 3315 2500**
Children **020 3315 3706**

The Royal London Hospital (London)
Adults and Children **020 3594 5693**

Queen Victoria Hospital (East Grinstead)
Adults **01342 414440**
Children **01342 414469**

Stoke Mandeville Hospital (Aylesbury)
Adults and Children **01296 315040**

John Radcliffe Hospital Oxford
Adult and Children **01865234760**

Initial management of severe burns

For burn injuries in adults >15% TBSA, elderly and children >10% TBSA or those that meet the LSEBN Burn Referral Criteria, consider early consultation with the local Burn Service

Assess the following points as part of standard ATLS protocol

AIRWAY

- Suspect inhalation injury if :
- Respiratory distress (dyspnoea, stridor, wheeze)
 - Voice changes
 - Signs of upper airway oedema
 - Deep facial burns
 - Sooty sputum
 - History of burn in enclosed space
- Seek review by senior anaesthetist
Consider need for early intubation (do not cut tube)
Sit upright all patients with facial burns

BREATHING

- Suspect smoke inhalation injury if raised COHb levels
Consider cyanokit with reduced GCS, early lactate acidosis
Administer 100% FIO2 if carbon monoxide injury suspected
Establish baseline ABGs and SaO2 (goal >95%)
Discuss with local burn service need for escharotomy
Considerations within circumferential full thickness injuries to neck/chest/torso with increased ventilation pressures or ventilation compliance

CIRCULATION

- Insert 2 large bore peripheral IV lines in unburned skin, if able
Take baseline bloods (U&Es, FBC, LFT, clotting, Amylase, CK, X-match, Drug/Tox)
Discuss with local burns service need for escharotomy in circumferential burns to limbs
Assess perfusion distal to burn
Elevate limbs

DISABILITY

- Assess pain score
Administer IV opiate analgesia according to patient's needs

EXPOSURE

- **Remove:** Hydrogel burn dressings
 Loose clothing/jewellery/nappies proximal to burn injury. Leave any adherent clothing.
- **Cool:** Wounds for 20 mins (with running water or wet compress if possible)
- **Clean:** With Normal Saline or Tap H₂O
- **Assess:** Extent of burn (%TBSA) using Lund & Browder chart. Do not include erythema in %TBSA estimation.
 Depth of burn
 Send photos via MDSAS or TRIPS www.trips.nhs.uk
- **Cover:** With loose longitudinal strips of Cling Film. Do not apply Cling Film to face.
 Chemical injuries must be fully decontaminated
 Implement active warming measures to prevent heat loss

FLUIDS

- Assess patient's weight
- Use Parkland formula to estimate fluid resuscitation requirements from time of injury:
 3mls/kg/% burn, half over the first 8 hrs, rest over next 16 hrs
 Administer warmed Hartmann's
- Additional maintenance fluid may be appropriate and can be discussed with the accepting Burn Service
- Adjust formula if delay between time of injury & presentation
- Insert urinary catheter and titrate fluids to urine output:
 Adults: 0.5 – 1ml/kg/hr
 Children <30kgs: 1ml/kg/hr
 Electrical: 1-2ml/kg/hr
- Maintain accurate fluid balance chart

OTHER

- Discuss with **local Burn Service:**
 Tetanus status
 Nasogastric tube
 Antibiotics (routine prophylaxis not required)
 Nil by mouth

REFER

- Refer to local burns service via TRIPS or MDSAS telemedicine referral system
Call local burn service to provide additional information
Make transfer arrangements. Keep warm. Sit head up
Telephone support and advice on care of any patient with burn injury is available at all times