ADULT SEVERE BURN MANAGEMENT

Burn Injuries >20% TBSA (Adults)

The following advice are specific points related to a burn injury, use in line with standard primary assessment

PRIMARY SURVEY

Airway

- **Assess airway risk**: enclosed-space burn, oedema, sooty sputum, facial burns, or distress (dyspnoea, stridor, wheeze, hoarseness).
- **Consider intubation**
- Maintain spinal precautions for high voltage electrical burn or mechanical fall involved in incident.

Breathing

- **Assess** and support breathing.
- If **circumferential chest burn**, assess adequacy of chest expansion or ventilation and consider escharotomy.
- **Administer high flow** (15L/min) via a non-rebreather mask.
- **Maintain Sao2 >92%.**

Circulation

- **Assess** circulation: pulses, blood pressure, capillary refill and colour.
- **Insert** 2 large-bore intravenous cannula. Preferably in unburnt skin or consider intraosseous access if needed.

Disability

- **AVPU** score.
- **Assess pupils.**
- Consider carbon monoxide/cyanide poisoning.

Exposure

- **Remove all jewellery** and clothing.
- **Estimate total burn surface area.**
- **Log roll** to visualise posterior.
- **Warm patient** eg space blanket /blanket.

Perform secondary survey in line with standard trauma care and assessment

INITIAL MANAGEMENT

Fluid resuscitation	• Use **modified parkland formula.** • Insert **indwelling catheter.** • Strict documentation of **fluid balance.** • **Titrate fluid resuscitation** to urine output goals: Adults 0.5ml/kg/hr. **Adults modified parkland formula** Formula is a guide only, titrate fluids to urine output target. Calculated from the time of injury: 3ml Hartmann solution **x** body weight (KG) **x** %TBSA • ½ given in the first 8hrs • ½ given in the following 16hrs
Analgesia	• **Assess pain** to determine analgesic requirements. • **IV analgesics** is preferred - Morphine 0.05-0.1 mg/kg. • **Titrate to effect**, smaller frequent doses preferred. • **Avoid over sedation** in conscious patients.
Wound advice	• **Assess:** depth and if burn is circumferential. • **Check if first aid** occurred, administer first aid if less than 3 hours from injury and clinically appropriate. Cool running water for 20 mins. • If **transfer <6 hours**: Cover with cling wrap longitudinally. • If **transfer >8 hours**: Apply paraffin gauze (jelonet/bactigras) or silver. Discuss with VABS the dressing availability at your centre.
Circumferential burn	• **Elevate** effected limb if possible. • **Assess limb perfusion** distal to burn: capillary refill, pulse, warmth and colour. • **Liaise with burns registrar to discuss** if escharotomy is required.
Other	• Insert **nasogastric tube.** • Administer **tetanus** immunoglobulin if required. • **Minimise heat loss.** • **Investigative baseline ABGs and tests as required.**

TRANSFER LIST

- ☑ Airway Secure
- ☑ O2 insitu
- ☑ IV access established and secure
- ☑ Fluid resuscitation commenced
- ☑ Patient kept warm
- ☑ Pain controlled
- ☑ NGT and IDC
- ☑ Wound covered with cling wrap or dressings
- ☑ Next of kin aware
- ☑ Handover to burn service as per ISBAR

VICTORIAN ADULT BURN SERVICE REFERRAL CRITERIA

Call VABS Registrar on 9076 2000.

Size	>10% TBSA > 5% Full thickness
Person	Pre existing illness Pregnancy Extremities of Age - Elderly
Area	Face/Hands/Feet/Perineum/Major Joints Circumferential (Limb or Chest) Inhalation injury
Mechanism	Chemical / Electrical Major Trauma Non-accidental injury (including suspected)