

BURNS PROTOCOL

EVALUATION

Primary survey

Approached as multiple trauma patients

Secure airway – general indications for intubation

- signs of impending airway obstruction
- circumferential burns of neck
- facial burns
- oedema of pharynx, larynx, evidence of upper airway burns
- unconsciousness
- loss of airway reflexes
- carbon monoxide or cyanide poisoning
- signs of respiratory distress
- usually unnecessary for <25% burns
consider if 25-40% burns
intubate if >40% burns

note: avoid suxamethonium especially 24 hours after burns

need to look out for cervical injuries (depending on mechanism of injury e.g. explosion, clinical signs and symptoms)

Vascular access

2 wide bore peripheral lines

central lines – use antibiotic coated lines if line access a great problem

arterial line

lines should preferably be inserted in unburned areas, must be well secured

Secondary Survey

Important aspects

History – documentation of mechanism of injury (fire burns, electrical burns, chemical burns, possibility of suicide and intoxication)

time of injury

close space injury

time of extrication, fluids given during transport

medical history

Examination – neurological

eyes, ENT

neck

cardiothoracic

abdomen

genitourinary and extremities

Assessment of burns area and depth

Rule of nines (for adults)

- Palmar surface of the patient's hand (without the fingers) is approximately 0.5% of the body surface over all age groups

Lund-Browder chart

Depth	level of injury	clinical features
Superficial partial thickness	papillary dermis	blisters, erythema capillary refill intact pain sensation
Deep partial thickness	reticular dermis	blisters, pale white or yellow no capillary refill absent pain sensation
Full thickness	subcutaneous tissue, fascia, muscle, bone	leathery, inelastic no capillary refill absent pain sensation

Investigations-baseline CBP, clotting, RFT, LFT, ABG

- Toxicology screen]
- Carboxyhaemoglobin] as indicated
- CPK, urine myoglobin]
- Radiological investigations as indicated

MANAGEMENT

Airway and Breathing

intubation – indications as stated

ventilation – refer to acute lung injury/ARDS protocol if complications arise

Extubation – can be considered 48-72 hours after injury

patient awake and able to protect airway

airway patency – resolved upper airway oedema

direct laryngoscopy/ cuff leak test/able to breath around the tube when balloon is down

no ventilatory problems and acceptable gaseous exchange

Fluid Management

Many formula available to guide fluid resuscitation. PWH uses the Parkland formula

Parkland Formula

- Hartman solution 4 ml/kg/% total body surface area burned in first 24 hours (give half of fluid requirement in 8 hours and other half in 16 hours)
- Avoid colloid first 24 hours after injury

