

# Initial Assessment and Care of the Severely Burned Patient (>20% Total Body Surface Area)

## STOP FURTHER INJURY:

- A. Extinguish or remove burning clothing
- B. Remove electrical contact if electrical burn
- C. In chemical burns
  - a. Continuous, copious irrigation
  - b. Remove contaminated clothing
  - c. Avoid self-injury; wear PPE

## HISTORY:

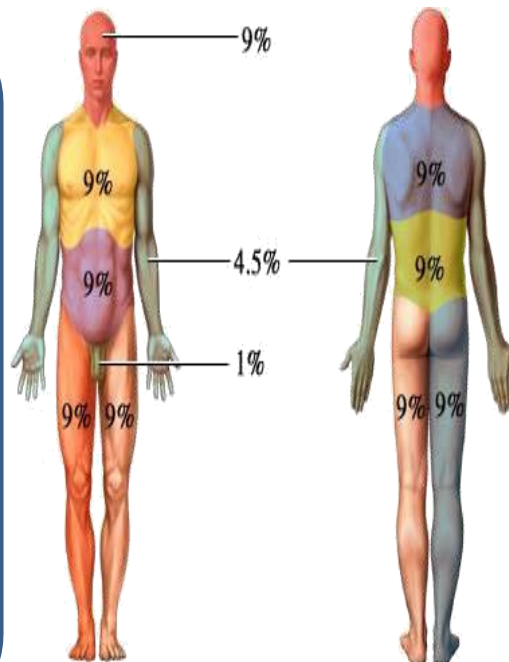
- A. Circumstances of injury
- B. Pre-existing illness
- C. Medications
- D. Allergies
- E. History of enclosed space fire
- F. History of alcohol and/or drug use

## PHYSICAL EXAMINATION:

- A. Check for associated injuries
- B. Estimate extent and depth of burn
- C. Determine weight of patient
- D. *Rule of nines*

## MAINTAIN VENTILATION:

- A. Administer humidified 100% O<sub>2</sub> by mask to treat possible carbon monoxide poisoning
- B. Examine airway for signs of inhalation injury
  - a. Singed nasal hair
  - b. Carbonaceous material in upper airway
  - c. Edema or inflammatory change in oral pharynx/upper airway
- C. Maintain airway
  - a. Endotracheal tube
  - b. Associated neck trauma
  - c. Associated significant chest wall injury
  - d. Acute airway edema/severe inhalation injury
- D. Mechanical ventilation if intubated



## MAINTAINENCE OF PERIPHERAL CIRCULATION IN PATIENTS WITH CIRCUMFERENTIAL EXTREMITY BURNS:

- A. Remove rings and bracelets
- B. Clinical signs of impaired circulation include:
  - a. Cyanosis
  - b. Impaired capillary refill
  - c. Progressive neurological signs
  - d. Doppler determination of peripheral pulses
- C. Escharotomy or fasciotomy if needed

## INTRAVENOUS FLUID THERAPY:

- A. Required by patients with burns greater than 20% TBSA
- B. Secure a large-bore IV cannula for IV fluids
- C. Place indwelling urethral catheter and attach to urometer
- D. Estimate fluid needs for the first 24 hours post burn
  - a. Adults → 2ml RL x kg x %TBSA
  - b. Children < 4 years old → 3ml RL x kg x %TBSA
- E. Plan on administering one-half of calculated volume in first 8 hours post burn, but adjust infusion rate to obtain
  - a. 30-50 ml of urine/hr, in patients >30kg
  - b. 1 ml urine/hr/kg body weight <30kg

## INITIAL BURN WOUND CARE:

- A. Cleanse and debride loose tissue
- B. Cover burns with dry sterile dressing or cover with a clean sheet
- C. Maintain temperature at 36-38 degrees celsius

## INTERVENTIONS:

- A. Nasogastric tube to suction
- B. Analgesic medications → given ONLY intravenously and in small doses
- C. Tetanus prophylaxis
- D. HOB >30 degrees