Burns can be caused by thermal, chemical, and electrical sources.

If an electrical burn is suspected, also see Pediatric Protocol Electrical Emergencies.

Remember that burn patients are volume depleted. However, burns do not bleed; therefore, look for other sources of bleeding. Assume that any patient with compromised perfusion has other injuries and treat accordingly.

Many burn injuries are associated with inhalation injury. The signs and symptoms of inhalation injury include: nasal and oropharyngeal burns, charring of the tongue or teeth, sooty (blackened), sputum, singed nasal and facial hair, abnormal breath sounds (e.g. stridor, rhonchi, wheezing, etc.), and respiratory distress. In cases of inhalation injury, attention should be given to the patency of the airway. Acute swelling can cause an airway obstruction. The Paramedic should consider the need for early intubation to avoid a complete airway obstruction.

Supportive Care

1. Trauma Supportive Care Protocol.

2. Stop the burning process, if necessary (do not cause hypothermia):

   Thermal Burns: Lavage the burned area with tepid water (sterile, if possible) to cool skin. Do not attempt to wipe off semisolids (grease, tar, wax, etc.).

   Dry Chemical Burns: Brush off dry powder, then lavage with copious amounts of tepid water (sterile, if possible) for 15 minutes.

   Liquid Chemical Burns: Lavage the burned area with copious amounts of tepid water (sterile, if possible) for 15 minutes.

3. Remove clothing from around burned area, but do not remove/peel off skin or tissue.
4. Remove and secure all jewelry and tight fitting clothing.

5. Assess the extent of the burn using the Modified Rule of Nines and the degree of burn severity. An additional method is to use the palmar surface of the patient as 1% BSA.

6. Cover burned areas with dry sterile dressings. If there is less than 20% 2nd degree and 5% 3rd degree burns, apply wet sterile dressings to burned areas for 15 minutes to aid in pain control.

7. Prevent hypothermia, keep patient warm and insure that all outer layers of dressings are dry.

ALS Level 1


ALS Level 2 (Physician Authorization Required)

None