# Southern Illinois Regional EMS System

DD-7 BURNS

ALS/ILS

Initial Burn Management

- Patient Assessment and Initial Care protocol
- Stop the burning process/further injury
  - o Remove the patient from the source.
  - o Remove clothing, jewelry, belts, shoes, or anything constrictive..
    - ▪ Do not pull away clothing stuck to the skin.
- Pay particular attention to the airway and potential complications.
- Oxygen therapy as appropriate
  - o 1-6 LPM by cannula: minimal distress.
  - o 12-15 LPM by NRB mask: moderate/severe distress with signs of hypoxia.
  - o 15 LPM by BVM: inadequate rate/effort, severe distress, unstable.
  - o Maintain SpO2 > 94%
- Initiate IV access with Lactated Ringers.
  - o Only start IV through burned tissue if no other access sites are available.
    - ▪ Minor burn, 18 gauge at TKO rate.
    - ▪ Moderate or Critical Burn, 14-16 gauge at W/O rate.
  - o Do not infuse more than 2 liters before contacting Medical Control.
- Pain assessment and management
  - o Assess pain on scale of 1-10.
  - o If hemodynamically stable:
    - ▪ **Morphine Sulfate 4-10 mg** slow IVP, for moderate to severe burns.
      - 4 mg initial dose, unless altered by Medical Control.
      - 2 mg increments, unless altered by Medical Control.
- Keep burn as clean as possible.
  - o Use appropriate PPE
- Assess depth of burn:
  - o Superficial
  - o Partial thickness
  - o Full thickness
- Assess extent of burns using the rule of nines or Palmer's rule (pt. palm =1% TBSA).
- Assess and treat associated injuries according to appropriate protocol.
- Contact Medical Control.
- Initiate rapid transport.

Wound Management

- Thermal Burns
  - o If TBSA < 20%:
    - ▪ Cool with sterile saline for 1 minute. (do not overcool or use ice)
    - ▪ Cover with dry sterile dressings.
  - o If TBSA > 20%
    - ▪ Cover with dry sterile dressings.
  - o Do not break blisters, debride skin or apply ointments.
  - o Open sterile sheet/burn pads on stretcher before placing patient for transport.
    - ▪ Consider and maintain adequate body core temperature.

DD-7 BURNS
(continued)

- Inhalation Burns
  - o Diligent assessment and maintenance of airway.
  - o Assess for the presence presence of:
    - Stridor
    - Wheezing
    - Black, sooty sputum
    - Cough
    - Hoarseness
    - Singed nasal or facial hair
    - Dyspnea
    - Facial burns
    - Swelling of oropharynx/laryngopharynx
  - o Contact Medical Control for conscious patient needing intubation.
  - o Consider presence of CO, cyanide, or other noxious gas inhalation.
- Electrical/Lightning Burns
  - o Ensure scene safety
  - o Have the source removed or shut off.
  - o Underlying tissue damage more extensive than outward burns/injuries.
  - o Treat dysrhythmias/cardiac arrest per appropriate SOP.
  - o Be suspicious of musculoskeletal injury.
    - Consider spinal immobilization
  - o Assess for entrance/exit wounds.
    - Cover with dry sterile dressings
      - Cooling unnecessary unless thermal injury is associated.
- Chemical Burns
  - o Ensure scene safety / avoid self injury and/or contamination.
  - o Remove contaminated clothing.
  - o Irrigate burn with copious amounts of water of saline.
    - Consider possibility of water reactive agent involvement.
    - Carefully brush away powdered/dry agent prior to irrigating.
  - o If burn occurred in an industrial setting, bring the MSDS.
  - o Alert the receiving hospital early if decontamination is needed.