Community Awareness And Preparedness

PRE-HOSPITAL TREATMENT FOR BURNS

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BURN - Injuries caused by exposure to excessive heat from thermal, chemical, electrical radiating sources.

- **THERMAL BURNS**
  - Heat
  - Very cold

- **Chemical Burn**
  - Acid
  - Alkalis

- **Electrical Burn**
  - Lightening
  - House Current

- **Radiation Burn**
  Often it is not possible to predict the exact depth of a burn in the acute phase.
  - Superficial (First degree) - involves top layer of skin.
  - Partial thickness (2nd degree) - Top layer burned and second layer damaged.
  - Full thickness (3rd degree) - all types of skin burned including fatty layer.

- **Total Body Surface Area Estimation**
  The body surface is divided areas representing 9% of multiples

- **Rule of Nines**

**FACTORS TO CONSIDER**
- Depth or classification
- Body surface area burned
- Age: adult vs. Pediatric
- Pre-existing medical conditions
- Associated Trauma
  - Blast injury
  - Airway compromise
  - Fall injury
  - Child abuse

- **PATIENT AGE**
  - Less than 2 or greater than 55
  - Have increased incidence of complications

- **BURN CONFIGURATION**
  - Circumferential burn can cause total occlusion of circulation to an area due to edema
  - Restrict ventilation if encircle the chest
  - Burns on joint area can cause disability due to scar formation

**PRE-HOSPITAL TREATMENT FOR BURNS**
- Stop the burning process.
- Run cold water over the burned area. Flash away chemical with water for 20 minutes or more.
- Remove smoldering clothing and jewellery. If you meet resistance or if you see pieces melted into the skin, cut around the area. Do not try to remove them.
- Perform initial assessment.
- Administer oxygen. Provide ventilation if needed.
- Determine the severity of burns, using the rule of nine. Cover the burns. Use try sterile dressing of disposable sterile burn sheet, do not use grease, ointment, lotion antiseptic or ice on the burn. Do not break any blisters. Fingers with second or three degree burn require dressing each finger individually.
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- Keep the patient warm and treat for shock.

**PRE-HOSPITAL TREATMENT FOR CHEMICAL BURNS**
- Brush off dry chemicals, such as lime powder, before flushing with water.
- Rinse the area with water for at least 20 minutes or more. Remove and set aside clothe and jewellery while the patient is being washed off.
- Apply sterile dressing to the affected area.
- Treat for shock.

IF PATIENT IS CONTAMINATED, WASH OFF THE PERSON FROM DISTANCE TO AVOID THE EXPOSING YOURSELF OF THE CHEMICALS.

**PRE-HOSPITAL TREATMENT FOR CHEMICAL BURNS TO THE EYE**
- Rinse the eye with water for at least 20 minutes or more. Maintain a flow of water.
On the affected eye from a low pressure, bottle, glass and other sources. Keep the patient eyelids open.

**PRE-HOSPITAL TREATMENT FOR ELECTRIC BURNS**
The more serious problem related to electric burns are respiratory and cardiac arrest, damage to the nerve system and injuries to internal organs.

- Perform initial assessment
- Evaluate burns and look for at least two burn areas
- Apply a dry, sterile dressing to the burns
- Treat for shock

**INHALATION INJURY**
This type of injury occurs when a patient inhales heated air, smoke or toxic products. Symptoms for these injuries may appear mild initially, then become more severe.

**PRE-HOSPITAL TREATMENT FOR INHALATION INJURY**
- Administer oxygen if needed.
- Monitor patient’s airway and breathing.
- Be prepared to ventilate.

**HEAT CRAMPS**
Heat cramps consists of pain and muscle spasm that occur when the body loses a large quantity of salt through excessive sweating showing the symptoms of Nausea, Periods of fainting etc.

**PRE-HOSPITAL TREATMENT FOR HEAT CRAMPS**
- Move the patient to a cool area.
- Give the patient water, the muscle cramp should be alleviated after drinking water.

The patient needs water more than the salt. Do not delay giving water to look for salt.

**HEAT EXHAUSTION**
Heat Exhaustion can occur when a person in poor physically condition exerts himself or herself during physically activity in a very hot environment, causing blood flow to be affected resulting weak pulse, weakness, dizziness, rapid shallow breathing etc.

**PRE-HOSPITAL TREATMENT**
- Move the patient to a cool place to rest.
- Remove or loosen clothing as necessary to cool the patient without causing chills.
- Place the patient in a supine position with legs elevated 20 to 30 cm.
- Administer oxygen as per protocol.
- Give water, but not to an unconscious patient.