How to Care for Your Child with a Burn

This leaflet will provide you with information about Burn causes, symptoms, treatment and home care advice.

What is a Burn?

Burns occur when some or all skin cells are damaged by excessive heat, chemicals, radiation, electricity or the sun.

Depending on the depth of burn the burn could be:

**Superficial**
- Superficial or epidermal burns involve only the first layer of skin called the epidermis.
- They do not blister but are painful, dry, red, and blanch with pressure.
- Such injuries are generally healed in six days without scarring.

**Partial-thickness**
- Partial-thickness burns involve the epidermis and portions of the dermis, which is the second layer of skin.
- These Burns are painful, red with blisters and sometimes if deep, can lead to scarring of the skin.
- They usually heal in 2-3 weeks.
Full-thickness

- These burns extend through and destroy all layers of the dermis and often damage the deep inner tissue.
- Skin appearance can vary from waxy white to leathery grey to charred and black.
- These burns are not painful as they damage the nerves that carry sensation.

What are the causes of burning?

- **Thermal burns**: can happen when the skin comes in contact with hot objects like (kettle, iron ..), hot drinks like (coffee, tea..), hot food, hot bathwater or hot steam etc. These burns lead to an increase in skin temperature.
- **Radiation burns**: this is commonly caused by exposure to the sun's ultraviolet rays causing sunburn or from radiation such as during treatment of certain conditions with high dose X-ray.
- **Chemical burns**: These happen when children swallow strong toxic acids like drain cleaner or button batteries or when chemicals (like bleach) come in contact with the skin or eyes.
- **Electrical burns**: These happen when children’s skin come in contact with the electrical current, like sticking fingers or objects in electrical outlets or biting on electrical cords etc.

What are the symptoms of Burns?

Burn symptoms depend upon the type and severity of the burn.

- Blisters
- Pain
- Redness of skin
- Swelling of skin
- White or charred (black) skin.
- Peeling of burned skin
How are burns treated?

Burn treatment depends on the cause and severity of burn. Most burns can be treated as an outpatient. Some moderate and severe burns require hospital admission. Your doctor will carry a full assessment of the burn wound and advice you about the best treatment options.

Treatment may include:

- **Cooling**: by running tap cold water for 20 minutes over the burned area. The aim is to reduce the ongoing damage of tissue by heat.

- **Pain control**: to reduce the distress caused by burn. If your doctor advises to give medicine. You can give your child
  - Paracetamol (any brand) or Ibuprofen (any brand)
  - Follow the instruction on the medicine package for the correct dose for your child
  - Do not give your child Aspirin as this can cause serious complications

- **Cleaning and debridement**: depending on the degree of burn, it might need the removal of dead skin or any foreign objects from the wound to reduce the risk of infection.

- **Dressing**: once the burned area of skin is cleaned, and dead tissue is removed, a dressing will be applied to cover the wound.

- **Antibiotics are not routinely required in burn management**: however, based on the reassessment of the wound at the following visits, the doctor will decide if the antibiotic is needed, and you will be advised in that visit.
Follow up and ongoing care

- Depending on the degree and area of burn on your child’s skin. The doctor will advise you on the follow plan for your child. Here are some general rules:

  o Children with superficial burns normally don’t require follow up. Please follow the home care advice below.
  o Children with minor burns and blistering will have their follow up in the Emergency Department after two days to reassess the burn and change the dressing. The need for following visits will be decided after the first visit.
  o Children with partial thickness burns sometimes are referred for specialist review in the burn unit at Al Wakra hospital for further management and follow up.
  o Some children may require referral to the Plastic Surgeon in the outpatient clinic. This is based upon the type and site of the burn.

Home care advice

First aid care

Burn severity and size can be reduced by following the first aid advice for Burn:

**Do**

- Hold the burned area under cool running water for 20 minutes or apply a cool, wet compress until the pain eases.
- Remove jewelry, ring or belts and other items, especially from around burned areas and the neck.
- For electrical burns, make sure the power source is off before you approach the child.
- Use painkillers such as paracetamol or ibuprofen
- Check wounds for signs of infection and tightening of the skin over joints and muscles, which makes them difficult to move.
Do not
- Do not apply butter, grease, turmeric powder, henna, toothpaste to the burn, as these can make the burn deeper and increase the risk of infection.
- Do not pop up the blisters on the burned skin as it might cause infection unless it is advised by your doctor.
- Do not apply ice because it deepens the burn wound.
- Do not give your child Aspirin as this can cause serious complications.
- Do not apply topical medication until the patient has been assessed by the doctor.
- Do not rub the involved areas as this skin is sensitive and delicate.
- Do not expose the burned area to the sun and to extreme hot and cold temperatures.

Preventing burns and scalds:
- Ensure hot drinks, kettle cords and pots are placed out of reach of children.
- Check bathwater temperatures before putting children in.
- Don't drink hot drinks while holding or feeding infants.
- Ensure extension cords are not accessible and damaged cords are replaced.
- Consider covering all electrical sockets with plug socket covers to avoid accidents.
- Keep children out of the kitchen whenever possible.
- Ensure correct placement of hot water dispenser to avoid unnecessary accidental scald burn.

When should I seek medical advice?

Seek medical advice if:
- The burn is on any part of the body, you child needs to come to the Emergency Department to be assessed.
- The burns wound came from a fire, an electrical wire or socket, or chemicals.
- Burn wound don't improve after two weeks.
- There are blistering and severe pain because of burn injury.
- Your child develops temperature over 38.0° C or 100.4° F after burn injury.
- There is yellow or green discharge from burns or other signs of infection.
- There is bleeding from the burn wound site.
- There is a sudden onset of severe, unusual pain, nausea, vomiting after burn injury.