## Burn Injuries: Care Advice

Disclaimer: This fact sheet is for education purposes only. Please consult with your doctor or other health professional to make sure this information is right for your child.

## Introduction

Burn injuries/wounds are potentially serious and should be managed by teams experienced in managing children with these traumas. Generally most children with burns can be managed as outpatients. Superficial burns normally heal within 10 days without scarring. Burns not healed at 10 days may require consultation with a burns specialist/ service to assess the need for surgery and the risk of possible scarring.

The treatment your child requires will depend on the size of the burn wound, the body part involved, the age of the child, and the depth of the burn injury. Special burn dressing products are used to support the wound healing and may be left in place for up to 7 days.

If the burn wound/s is/are large, deep, very painful or involve particular areas of the body that make it difficult to manage at home, the child may be admitted to hospital so additional therapies can be accessed. Electrical burns will probably require admission to hospital.

Appropriate use of cold running water for 20 minutes, as a first aid treatment will significantly improve the outcome of the burn injury.

#### First aid

#### Stop the burning process as soon as possible

- Flame burns- Put out the fire ("stop, drop, cover (face) and roll"). Do not run
- Scalds from hot fluids—remove clothing as quickly as possible (as hot fluid soaks into clothing and continues to inflict burning)
- Skin stuck to clothing

  Do not remove
- · Remove jewellery

#### Dial 000 if your child is:

- Unconscious
- Has difficulty breathing, or is suspected to have inhaled hot fluid or the steam from the hot fluid
- Has pain that you cannot control

In most cases simple first aid and pain relief are all that is needed before seeking medical attention.

#### First Aid:

Apply cold running water over the surface of the burn for 20 minutes—start as soon as possible after the accident. Try to keep the child warm and avoid shivering

- Warm the room (or your car) to  $28 30^{\circ}$  C if possible
- Do not apply ice, iced water or any other creams or lotions (they are not helpful and may make the burn injury worse)
- Cold water 'misted' over the burn from a spray bottle, may be used whilst transporting

- the child to medical help
- Cold wet cloths are less effective in first aid treatment because they retain heat and need to be rinsed in cold tap water every minute
- If first aid is delayed, applying cool running water to the burn is still helpful up to three hours after the accident.

#### Treatment

Appropriate pain relief/analgesia for the/your child

- A dressing is applied to protect the injury from further trauma and promote healing
- Burn wounds are reviewed and redressed every 3-7 days (it may take up to 14 days to determine how deep the burn is)
- Burn wounds that have not healed within 14 days should be discussed with a burns specialist service to determine ongoing treatment
- · Wound dressings may change as the burn proceeds to heal
- Home care instructions for the child, together with contacts and respective phone numbers will be given to you prior to discharge

#### Pain relief

All burns are painful.

- Cold water provides excellent pain relief if used early
- Medicine such as Panadol<sup>™</sup>, Dymadon<sup>™</sup> or Tempra<sup>™</sup> can give good pain relief
- If pain is not able to be managed at home with oral medication—the child requires immediate review by a medical officer. Consider—Your child may cry for a number of reasons besides pain (i.e. fear, anxiety and hunger)
- Your reassurance will be comforting to them (listen to their fears and answer their questions truthfully)

## What can go wrong?

#### Infection

#### Seek Immediate Medical advice if-

- The child seems unwell, or won't eat or drink.
- The child has a temperature over 38.5 degrees Celsius
- The wound has an offensive odor
- The skin surrounding the wound becomes red and hot to the touch
- The fluid from the wound increases. There is pain at the site of the burn wound
- The dressing is dislodged, or completely falls away
- Keep wound dressings clean and dry
- It is important to avoid your child coming into contact with anyone who has or is developing cold sores on the lips, or has chicken pox (unless your child has had chicken pox or has been vaccinated against it)

#### Diet

Encourage your child to eat healthy food. Wholesome nutrients assist healing.

## Activity

Your child should engage in normal play. Accidents which cause pain and require the child to go to hospital can make them feel insecure so extra cuddles are needed.

• Children often feel guilty because they have caused so much trouble. Be patient but continue to have the same important rules at home even if the details are more relaxed.

## Will my child need an operation?

In the first few days following a burn, it is often not possible to tell how deep the injury is, how long it will take to heal or if there will be scarring.

Any burn that heals within 10–14 days is unlikely to scar and will probably not require an operation. If much or all of the skin in the area of the burn is destroyed or healing is slow, there is likely to be scarring, so healing may be enabled by an operation. In this operation, the dead skin is removed and the area is then covered with a thin layer of skin taken from another part of the body (a skin graft). A decision about grafting may be made after 10–14 days post the initial injury. The operation will be fully explained to you by the attending Surgeon.

## Scarring

If the burn injury has taken longer than 2 to 3 weeks to heal or has required a skin graft, scarring is likely.

With time, burn's scars may become raised, red, itchy and painful and may cause limitation of movement if over a joint.

Once the burn is healed, treatment of the scar is crucial, to reduce potential limitations to motility and improve the long term appearance of the affected skin.

The Surgical team and physiotherapists will be involved in scar treatment and management.

#### After care

All new and healed burns are very sensitive to sunburn.

- Keep burn areas covered and apply Factor 30+ sunscreen.
- If the burn has healed quickly (meaning that it has not been very deep) it will become less sensitive after six to twelve months.
- New skin needs to be kept conditioned by regular use of moisturising cream (use glycerine and sorbolene cream at least twice a day).

• Deep burns will need moisturiser more frequently, for a longer period of time

# Remember

First aid – first stop the burning process, remove hot clothes and jewellery and apply tap water for 20 minutes

- Follow the treatment and advice of your doctor to achieve the best possible outcome in terms of appearance and function for your child
- With good care, most burns heal with minimal scarring