## **Burns**



Burns require immediate treatment and, depending on what part of the body is involved can come with complications. The initial treatment for a thermal burn or scald is to remove the heat source and cool the wound with water for at least ten minutes. Leave any clothing that has melted to the skin in place.

Burns are graded in severity; superficial, partial thickness and full thickness. The initial first aid treatment is the same regardless of the burns depth, but it is useful to understand that a minor burn that has only caused slight reddening of the skin with no other damage is superficial. A burn with reddening and formed blisters is partial thickness and when the skin surface has been completely burnt through, is full thickness. It goes without saying that the deeper the burn the more serious it is. Also, the greater the surface area of the body covered by the burn the more severe it is. Burns that affect the face, airway and groin areas all come with their own complications.

# **Treatment**



Burns to the face and airway are extremely serious

- Remove the heat source
- Check the patient's airway for signs of burn injury and swelling
- Cool the area for at least 20 minutes with cool (not too cold) water
- Remove any clothing that has not stuck to the skin from around the burn and remove any jewellery from near the burnt area
- Cover the burn loosely with clingfilm (DO NOT wrap it around the injured part tightly)
- Elevate the wound if possible
- Give painkillers such as paracetamol (if the casualty can take them)
- Consider other injuries especially following a violent blast or impact
- Seek medical advice or call 999 if the burn is serious (see below)

**NB:** If the burn area is deep or larger than the size of the palm, affects the face, airway, genitals or limbs, medical help should be sought immediately. This is also the case for burns that cause charred skin and whitening.



1. Remove the heat source

2. Cool the burn

3. Cover the burn with clingfilm

If there is no water source available to cool the wound, a special burn dressing can be applied to the effected area. These dressings are soaked in a gel that cools and protects the burn. There are various brands but 'Water-Gel seems to be the main one. These dressings are available in different sizes from small, facial to full body blanket. Using these dressings to treat a burn is the only exception to the rule of not applying creams, oils or ointment. Remember – the recommended treatment is to use water to cool the burn.



The initial treatment - water, clingfilm or burns gel

#### What NOT to do

- Over cool and cause hypothermia
- Use ice or iced water
- Pull off clothing which has melted to the skin
- Apply oil, creams or butter to the burn
- Apply adhesive plasters or dressings
- Burst blisters

#### **Electrical Burns**

Electrical burns are a medical emergency. Initial treatment is to check for danger and isolate the power supply (if domestic) and check for response and breathing. There is a risk that the casualty could be in cardiac arrest so be prepared to carry out CPR (Cardiopulmonary Resuscitation). If the patient is conscious, treat any burns in the way listed above and be aware that there could be an entry and exit wound. The patient will require admission to A&E because of the underlaying problems that can result. Electrical burns caused by high voltage electrocution are a different ball game. These injuries can be horrific and will probably cause a cardiac arrest. Your safety is paramount in this situation and you must not approach the scene because of the risk from arcing and being electrocuted yourself. Stay well back and call 999.

### **Chemical Burns**

Burns that have resulted from chemicals are slightly more complex to treat. There is a risk of the medic becoming contaminated with the corrosive substance so PPE (gloves and eye protection etc) should be worn. Remove the casualty from any chemical source and irrigate the burn with lots of water for at least twenty minutes. Avoid being splashed by the water and make sure the water does not run onto unaffected areas on the casualty. Cut clothing off that has not stuck to the skin rather than pull it over their head and remove any jewellery (if possible). Don't cover a chemical burn with clingfilm – just keep flushing it with water and call 999.

With any burn, fast treatment – cooling, can limit the amount of damage caused to the body. Shock and infection risk also need to be considered, especially with the more complex and serious burns. Think about carrying some equipment in your medical kit to deal with a burns incident should one ever occur and make sure everyone in the group understands how a burn needs to be treated.