Appendix 8
SKIN EXPOSURE TO CHEMICALS

Many chemicals may produce burns when in contact with the skin or eyes or mucous membranes. These are very similar to burns from fire or electricity.

Moreover, the chemical may be absorbed through the skin, causing general symptoms of poisoning such as nausea, vomiting, headache, breathing difficulties, cramps and gradual loss of consciousness.

Diagnosis

Depending on the chemical, the site and duration of contact, symptoms and signs may include:

- Irritating rash.
- Burning pain with redness and/or swelling of contaminated skin.
- Blistering or a loss of skin and/or underlying tissue.

Decontamination

In all cases of skin exposure, decontamination must be performed.

Further advice: **see table 8.**

Treatment

If exposure was to **hydrofluoric acid or hydrogen fluoride**: **see table 16.**

If exposure was to **anything else**: **see table 8.**

In general, after decontamination has been performed, treatment of burns should be undertaken as follows:

- Wash your hands and forearms thoroughly and then remove the first-aid dressing to expose either a single burned area (in multiple burns) or a portion of a large single burn. The aim is to limit the areas of burned skin exposed at any one time to lessen both the risk of infection and the seepage of fluid. Clean the skin around the edges of the burn with soap, water and swabs. Clean away from the burn in every direction. **DO NOT** use cotton wool for cleaning as it is likely to leave bits in the burn.
- Leave blisters intact but clip off the dead skin by using a sterilized pair of scissors if blisters have burst. Flood the area with clean, lukewarm (previously boiled) water from a clean receptacle to remove debris. With a soaked swab, dab gently at any remaining dirt or foreign matter in the burned area. **Be gentle** as this will inevitably cause pain.
- Next cover the burn with a sterile dressing (e.g. perforated silicone dressing or vaseline gauze), overlapping the burn or scald by 5 to 10 cm (2 to 4 inches). Now apply a covering of absorbent material, e.g. a layer of sterile cotton wool, to absorb any fluid leaking from the burn. This is held in place by a suitable bandage – tubular dressings or crepe bandage are useful for limbs and elastic net dressings for other areas.
- Thoroughly wash hands and arms before proceeding to deal as above with the remainder of a large burn, or with another burn in the case of multiple burns.
- Dressings should be left undisturbed for 3 to 5 days unless the dressing becomes smelly or very dirty, or the temperature is raised. Redress such areas as described above.
- If there is persistent pain, give two tablets of paracetamol every 6 hours until the pain is relieved.
- If there is severe pain, not relieved by the paracetamol, give 10 mg morphine sulphate and 10 mg metoclopramide intramuscularly, if advised medically.

Further advice on **pain relief**: **see table 13.**

- If the burn is other than small in area (i.e. more than 9 times the size of the palm of the hand), give a full glass of water (preferably oral rehydration salt solution) every 10 minutes to help replace fluid loss.

Further advice on **fluid replacement**: **see appendix 13.**