

The hideously burnt child

General features:

- Scalds mainly in the under 4s
- Mainly in boys
- Poverty and overcrowding is a risk factor

Features determining severity:

- Temperature
- Duration of contact

At 44 degrees, contact = 6 hours

At 54 degrees for 30 seconds

At 70 degrees within 1 second

Primary survey

- Airway burns
- History of exposure to smoke in a confined space
- High flow oxygen
- **BURNS SHOULD NOT CAUSE SHOCK:**
- **If they are shocked, they are bleeding from somewhere**
- Exposure should be minimal: burnt children lose heat rapidly

Secondary survey

- Estimate the burnt area
 - Rule of 9s cannot be applied to the under-14s
 - Use the palm and fingers: its 1%
- Estimate the depth
- Look for circumferential burns of the limbs or the neck
- Burns of the perineum are more prone to infection

Emergency management

- Analgesia
- If over 10% of surface is burnt, give fluids:
- **Daily fluid therapy = percentage burn x weight (kg) x 4**
- **First half in the first 8 hrs**
- Cover the burns in sterile towel +/- cling wrap
- Leave the blisters intact.
- Don't use cold compresses for longer than 10 minutes; never transfer the child with compresses in place.

Carbon monoxide poisoning

Measure carboxyhemoglobin:

- **2-20% = give oxygen**
- **Over 20% = put them in a hyperbaric oxygen chamber**

Indications for transfer to a burns unit:

- **10% partial and/or full thickness burn**
- **5% full thickness burns**
- **Burns to “special areas”- hands, feet, face, perineum**
- **Circumferential burns**
- **Inhalational burn**
- **Chemical, radiation, or high voltage burns**