

Treatment of burnt cat/dog patient

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1. Determine the extent of the burns
 - a. Severity and extent may not become apparent for up to 14 days
 - b. Greater than 10 – 15% of body surface area affected will require extended and intensive treatment times.
 - c. Lund and Browder chart for children is more accurate than Wallace rule of 9 for estimation of burnt surface area in animal patients.
2. Determine depth of burns
 - a. Superficial burns – painful, blisters, red skin
 - b. Partial thickness burn:
 - i. painful, red, bleed on pin prick and 2-week healing time
 - c. Deep partial thickness burn:
 - i. blotchy red/white, oedema; slow bleed on pin prick; no blanching on pressure
 - ii. 2-4-week healing time
 - d. Full thickness burn
 - i. no blood on pin prick; no pain; black, leathery skin
 - ii. escharotomy indicated at 5 days and or will take >4 weeks to heal.
3. Establish an IV line and start 0.9% saline
 - a. Continue fluids for 3 – 5 days.
 - b. Assess dehydration with pcv/tpp/urea/creat and alter fluid rates based on results.
 - c. Acute renal failure is a common sequela to burns.
4. Assess burns and begin treatment under anaesthesia. Opiates can be used as premeds and for ongoing pain relief.
5. Soak burns for 10 minutes in 0.9% saline. Change water when dirty. Goal is to remove soot and debris from burn to be able to assess it.
6. Debride necrotic skin from the burn using tissue scissors. Flaps of dead skin do not protect the burn but harbor bacteria.
7. Dressings – wet-to-dry dressings can be used initially. However, as silvazene can penetrate the eschar, a standard burns dressing as described below can also be used initially.
8. Apply silvazene evenly to all surfaces of the burnt area. Pay attention to getting silvazene around nail beds.
9. A non-adherent dressing – melolin is applied to the wound. Padding such as cotton gauze squares can be used to soak up further necrotic debris.
10. Apply bandage (work from extremities up) to keep the dressings in place. Bandage needs to be firm and light but not tight.
11. Antibiotics are indicated as our patients are not in sterile burns wards! Penicillins may be used initially, however, *Pseudomonas* is a common invader of burnt skin and drugs effective against this pathogen (fluoroquinolones) are recommended.
12. Bandage changes are required daily initially. Silvazene is only effective for 24 hours. Sedation/anaesthesia will be required until there is granulation tissue (from day 7 onwards).