

CARING FOR YOUR HORSE AFTER A BUSHFIRE

BURNS

Burns can be classified as 1st, 2nd, 3rd or 4th degree which indicates increasing severity and involvement of deeper layers of the skin. Generally, erythema (redness), oedema (swelling) and pain are favourable as they indicate some tissue viability. First degree burns are the most painful, involve the superficial layer of the skin and tend to heal without complication. Second degree burns can take 14-17 days to heal with minimal scarring, however, if they are deeper and involve the basement layer horses show minimal pain and the burns can take 3-4 weeks to heal often with extensive scarring. Third degree burns are significant and often require intensive care to stabilise the horses' condition with increased risk of infection, morbidity and mortality. Due to the nature of burns, the full extent of the injury may not be evident initially and accurate evaluation of wounds is not possible within the first 24 hours. Additionally, concurrent respiratory injury appears to increase the risk of mortality and so hospitalisation is the best option to improve survival rates.



WOUND CARE

Wounds can be cleaned with sterile 0.05% chlorhexidine solution, surrounding hair clipped, cold water bath applied to reduce further thermal damage, and flomazine cream applied topically. Wounds should be cleaned and ideally cream applied 2-3 times daily. If extensive wounds are present, large amounts of fluid (along with protein) can be lost from the body and fluid replacement via intravenous therapy is recommended in these cases. There are a variety of methods to manage wounds in horses and it often depends on extent and location of the injury.

TREATMENT

Treatment ultimately aims to keep the wound dry as bacteria do not thrive on a dry surface and to protect from mechanical trauma. The most practical approach to large burns is to allow eschar formation (sloughed or dead piece of skin to act as a biological bandage) with application of flomazine topically. The eschar does not prevent bacterial contamination, heat loss or water loss, thus the application of topical antibacterial is required twice daily. The eschar will normally slough after 4 weeks. Silver sulfadiazine dressings could be applied to wounds depending on location to enhance protection of granulation tissue, bacterial contamination and reduce water loss. Routine use of systemic antibiotics is not recommended in burns patients.

We recommend flomazine cream over others available on the market due to its antibacterial properties and water based formulation as it contains silver which has natural anti-bacterial effects and encourage skin growth (epithelialization). Please avoid the use of corticosteroids (Dermaped & Neocort) as these will reduce skin healing and the immune response which could increase risk of wound infection.

SMOKE INHALATION

Horses with smoke inhalation usually present with evidence of coat scorching, skin burns, difficulty breathing, coughing, dehydration, shock and weakness. Hospitalisation is often recommended as oxygen supplementation is required along with fluid therapy and ongoing medical management. Antibiotics and corticosteroids are not shown to improve survival rates- systemic antibiotics are only useful in proven infections which often occur 2-3 days after smoke inhalation. Horses with smoke inhalation carry a guarded to poor prognosis with the presence of burns further decreasing survival rates. Patients should be monitored closely if smoke inhalation is suspect and hospitalised if burns are also present. Successful treatment relies on early and aggressive treatment with ongoing patient assessment. It can take anywhere from 6 weeks to 6 months for horses to recover, however residual respiratory disease (Inflammatory Airway Disease- IAD, Recurrent Airway Obstruction- RAO) may remain.

NUTRITION

Sick horses require increased energy to heal and can often lose weight if feed is not increased to account for the body's increased demands. Weight loss of 10-15% during the course of illness indicates inadequate nutritional intake. Severe burns can result in protein loss, electrolyte imbalances and water loss. We recommend gradually increasing grain, adding fat in the form of oils (which also enhances skin barrier) and ad lib lucerne hay to increase caloric intake. Additionally, if there is any smoke inhalation or evidence of burns around the face or muzzle we recommend feeding soaked hay and ensuring your horse is fed on the ground to assist in chewing, clearing of airways and reduced risk of aspiration into the lungs.

Please do not hesitate to give us a call if you have any further enquiries on 0412 619 740