

THERAPEUTIC MANAGEMENT OF SECOND DEGREE BURNS IN BUFFALO

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Abstract: Six graded murrhbuffaloes were brought to the veterinary dispensary for treatment for burns in different parts of the body. Severe burns on the body involving the dermis and dermis of the skin. These animals were treated for correction of dehydration and electrolytic loss. Prevention of secondary bacterial infection with streptopencillins, along with the management of body condition. Significant recovery was observed in all animals.

Keywords: Burns, Graded Murrhbuffaloes.

Introduction

Burns are not common in animals mainly occurred due to accidents. The burns are various based on their source of origin like fire, electricity and some chemicals. The burns are classified into three types based on the involvement of the different layers of the skin. The burns in animals by fire or heat are more than other sources (Yadav et al 2010 and sandhya et al 2016). Mostly the animals which are in farm with stall fed are mainly involved in fire accidents. The major source of the fire accident is the thatched houses and the paddy straw heaps near the animal house (Devi Prasad et al 2017). The present study deals with the fire accident of 6 graded murrh buffalo animals accidentally caught fire and burnt in the different parts of the body.

History:

The present deals with the study of 6 graded murrh buffaloes caught fire when they are provided shelter, which is made with coconut leaves and grass and other thatched material which are easily prone for fire. These animals were subjected to treatment within 30 minutes after they got fire. Out of six animal's one animal got more than 90% fire exposure, two other animals and one calf of 6 month were also got severe injuries with 40% of burns, while other two were slightly exposed with minor injuries.

The animal with 90% teh skin was completely burnt off, the head and thoracic portions were exposed to fire which results in severe burns on head and thoracic portions involving the epidermis and dermis. The both eyes were completely exposed to fire result in the loss of

vision. Ear pinna was completely charred off. The remaining animals with 40% burns also involved with second degree by involving the epidermis and dermis but the extent was less compared to the above animal. On the clinical examination all the animals were reported to be with slightly raised body temperature, the pulse rate also increased and all animals were observed to be anxiety and tensed.

The body temperatures were recorded as 104- 105 F and burns are observed on face, croup, and back regions (Fig: 1& 2). The other portions of the body were injured at less extent. The other general clinical symptoms like congested mucous membrane, charred eye lashes and hair over ear pinna, dryskin were observed. The 1st and 2nd degree burn clinical signs observed were in similar with the clinical signs reported by Venugopalan (2005), Yadav (2010), Kavitha (2011) and Choudary (2011).

Treatment and discussion:

All the animals were advised to provide with comfortable bedding and treatment was started immediately. The better results of burns treatment were successful with correction of body fluid balance by restoration of ionic balance, reduction of hypovolemia along with the prevention of secondary bacterial infections. A multi-dimensional treatment was adopted to treat these animals similar to sandhya et al 2016, Sagar et al 2010. To restore the ionic balance we used inj.haemacal (450ml) and to restore hypervolemia Dextrose normal saline and Ringer's lactate were infused each @ 45ml/kg body weight. In order to prevent the bacterial infection streptopencillin (Dicrysticin-S 5g) and inj ciprofloxacin@ and inj metronidazole @ were used. The streptopencillin was given intra muscularly for seven days B.I.D while the ciprofloxacin and metronidazole were given intravenously for 5 days. For supporting treatment inj. Tribivet @ 10ml for animal 5ml in calf was used. toreleave shock inj. dexamethasone@4mg was given in slow intra venous administration inj. Pheneraminemaleate was gives antihistamine 10-15ml/animal, inj. Melonex @0.5mg/kg bwt was used as anti-inflammatory drug.

The lesions were cleaned with pp lotion 1:10000 dilution; the severely affected portions were applied with silverex ointment, while remaining portion were applied with povidine iodine. Topicure was used to prevent the maggot infection. The treatment was carried for three weeks while results in the restored normal condition in 3 animals (Fig: 3), but one animal with severe burns of 90% body involvement was died on the 2nd day of accident. The burns in animals were most uncommon, mostly the fire is the main cause in the burns in animals (Yadav et al., 2010 and Sandhya et al., 2016). The treatment was adopted in multi directional

as of which involves restoration of electrolyte loss, prevention of bacterial infection and brings the animal to normal condition (grieser and walker 1984). The multi-dimensional treatment was giving good results, similar results were also reported by Devi Prasad et al (2017) and Sandhya et al (2016).

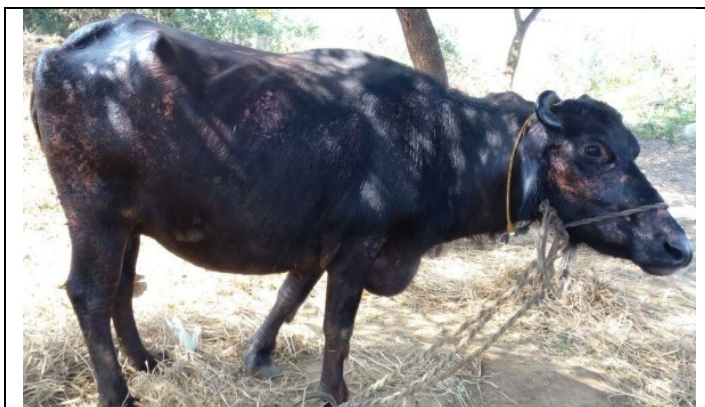


Fig:1 She buffalo with burn oncroup, and back of the body



Fig.2: She buffalo showing Burns on face

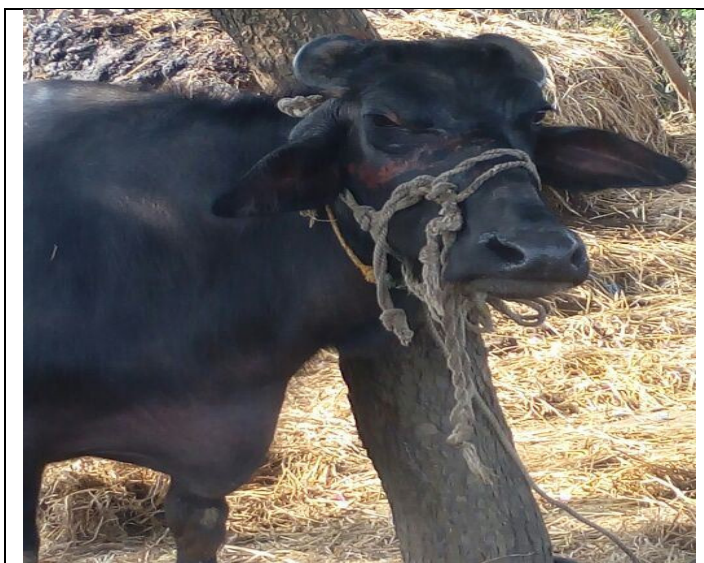


Fig.3: Buffalo showing recovery after treatment

References

- [1] Chaudhary PS, JP varney and VV deshmukh, 2011. Emergency and critical care of Thermal Burns in Bovines. *IntasPolivet*, 12: 172-179
- [2] Geiser DR and RD walker, 1984. Management of Thermal injuries in large animals. *Vet Clin North Am Large AnimPrac*, 6: 91-105.
- [3] Kavitha, G., Shivaprakash, G. and Ravindra, R.R., 2011. First and Second Degree Burns in 21 Animals due to Accidental fire and their Therapeutic and Critical care management. *IntasPolivet*, 12(2): 180-182.
- [4] Sagar, P.V, Rajesh, K., Kavitha L and Suresh, K. 2010. Clinical management of second degree burns in a she buffalo: A Case Report. *Buffalo Bulletin* 29 (1): 65-68
- [5] Sandhya, M., 2016. Clinico-therapeutic management of 10 and 20 burns in cattle and buffaloes. *Int J of Vet Sci* 5(4): 302-303.
- [6] Venugonplan, 2005. *Essentials of veterinary Surgery*. 7th edn. Oxford and IBM publishing Co Pvt Ltd, pp:70.
- [7] Yadav, G.V., Pitalawar, S.S, Chowdhary, K.S and Masare, P.S., 2010. Management of burns in bovine: a clinical study, 11: 52-53.
- [8] Devi Prasad V, Ravi Kumar P and Makkena Sreenu., 2017. Clinical Management of burns In graded Murrah she buffaloes. *International Journal of Science, Environment and Technology*, Vol. 6, No 4, 2017, 2497 – 2500.