

Diagnosis and Management of Ulcerative Thelitis in a Graded Murrah

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Abstract

A recently parturited second lactation graded murrah was presented with amastitic ulcerative thelitis with focal necrosis of skin and leaky teat fistula, was successfully treated with local application of Chlorhexidine gluconate and Cetrimide solution and 10 percent Zinc oxide in paraffin ointment.

Keywords: Antiseptic; bandaging; buffalo; ulcerative thelitis

Introduction

Ulcerative thelitis (UT), a condition affecting primarily high yielding milch animals, more frequently encountered in buffaloes as compared to cows (Abd-El-Hady, 2015) causing heavy economic losses to owners. The condition is caused by bovine herpes virus-2 and is characterized by acute inflammation of one or more teats with subsequent thickening, narrowing or closure of teat canal leading to incomplete milk drainage (Lokanadhamu *et al.*, 2005) followed by ulceration, focal necrosis and either partial or complete sloughing off the affected teat. Though, the quality of milk appears to be normal unlike in clinical mastitis however, the healing may be delayed due to trauma of milking and secondary bacterial infections.

History and Observations

A normally calved, healthy with her calf and non retained placental graded murrah buffalo, aged 5½ years in her second lactation was presented with history of teat necrosis since seven days and now the affected teat has become leaky laterally. The history revealed that the teat was swollen suddenly after ten days of calving and thereby leading to difficult milking and peeling of skin and pain in affected teat. Treatment was given but the condition worsened further with no result and ultimately resulted in bursting and leaking milk from affected teat. The milk production of the buffalo declined to 5.5 kg from 10 kg per day.

The clinical examination revealed the focal necrosis of skin encircling the left hind teat with healthy tissues too (Fig. 1 and 2). The rectal temperature (100.5°F), feeding and water intake were found normal. There

was slight increase in size of affected teat with glistening appearance followed by peeling off and ulcer formation. The affected teat showed partial slough off, leaky on touching and pressing. The necrotic skin was removed carefully with minimal trauma and hemorrhages causing exposed teat canal and free flowing of milk from affected teat. The milk samples collected from teats were normal in colour and consistency. On spot performed California Mastitis Test (CMT) was found negative on 1st, 5th, 10th and 26th day for all quarters.

Diagnosis

Based on the clinical findings, the teat was diagnosed with ulcerative thelitis without involvement of mastitis. Though, the affected teat was confirmed as ulcerative thelitis, however considered as simple ablation case involving the soft tissues of the teat.

Treatment

After considering that neither affected nor unaffected quarters are mastitic but declined to 5.5 kg from 10.0 kg per day and the earlier therapy did not resulted in significant remedy rather the problem aggravated with economic losses. Therefore, surface antiseptic, zinc oxide ointment and bandaging of affected part was taken into consideration for the treatment. Savlon^a (Chlorhexidine gluconate and Cetrimide solution) was used to wash and clean affected part of teat and the homemade ointment (Zinc oxide 20 gm in Paraffin gel for 180 gm) was applied and bandaging was also performed for effective and long lasting contractedness of the ointment and to check the milk leakage. This treatment was followed twice daily till recovery. The owner was advised to follow hygienic conditions. On 5th day, the case was followed and CMT was performed to be negative for all quarters (Fig. 3). It was found that there was great response to proposed treatment and the owner was

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Fig. 1: Left lateral udder view



Fig. 2: Hind udder view

Fig. 3: Affected teat on 5th day of treatmentFig. 4: Healed teat on 26th day of treatment

further advised and convinced to follow the treatment till recovery. On 10th day, the case was again followed revealing great response and reduced leaking milk from affected teat. CMT was again performed with no mastitis in any of the quarter. On 26th day, there was complete healing of affected teat and patented teat canal too, with no leakage of milk and the milk yield had increased to 9.0 kgs. The case was treated successfully (Fig. 4).

Results and Discussion

Ulcerative thelitis encountered in current case, the sudden onset of acute inflammation of one teat with subsequent thickening, narrowing of teat canal leading to difficult and very painful milking. There was glistening appearance followed by peeling off and ulceration and finally necrosis and partial skin sloughing. Though, the milk from all quarters was normal in appearance, however, CMT test was also negative for all quarters. The cleansing with antiseptic solution, application of 10 percent Zinc oxide in paraffin gel and bandaging proved beneficial

economical with complete recovery and successful normal milking from affected teat.

Conclusion

Based on the findings of the study, it can be suggested that, early treatment of ulcerative thelitis with topical application of Zinc oxide ointment 10% along with cleansing the affected part with antiseptic and hygienic conditions reduces treatment period as well as economical losses. Though, the local applications and cleanliness speed up the healing and restored the normal milk production within 26 days, however, it is advocated that self discretionary suitable therapeutic measures may be followed to fasten the recovery.

References

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