



MANAGEMENT OF THELITIS IN GRADED MURRAH BUFFALOES

Veterinary Science

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ABSTRACT

A total of 14 cases of graded murrah buffaloes were suggestive of thelitis were presented at Veterinary Dispensary, Elamaru, Krishna district, Andhra Pradesh. Out of 14 cases 11 cases (78.58%) were found to swollen teats and 3 cases (21.42%) with sloughing off the skin over teat. Microbial culture reveals the presence of *Candida albicans* only observed in the skin sloughing off cases but no other microbial load observed from others. Out of 14 cases 11 were responded to treatment with Enrofloxacin and other 3 cases were responded to streptopenicillin along with candiderm ointment. Significant recovery was observed in all the animals.

KEYWORDS

Thelitis, Graded murrah, *Candida albicans*.

Introduction:

Thelitis is the inflammation of one or all teats wall layers including teat skin, teat canal and cistern (Hanaa *et al.*, 2011). Pathogens can invade the teat canal ascending toward the mammary parenchyma, then colonize, multiply and produce their toxins and finally predisposing to mastitis. So teat skin should be free from microbial contamination/lesions to maintain the health of animals (Sharma *et al.*, 2005). The incidence of obstructive thelitis is noticed most commonly in first lactation buffaloes predominantly in graded Murrah than non-descriptive animals.

Clinical Examination

In the present study a total of 14 cases were brought to Veterinary Dispensary, Elamaru village suggestive of thelitis with the clinical signs of swollen and soft teats were noticed in the 11 cases (78.42%) and sloughing of skin over the teat in 3 cases (42%). The animals affected were mostly found to be very early lactation within a week after calving 8 cases (57.12%) and only 6 cases (42.88%) were found to be affected in between 10-15 days after calving. They were characterized by swollen, soft teat which increases 2- 3 times to the normal size and found to be hot (Fig. 01), which was later on becomes hard and painful. Sometimes this was become pathetic by sloughing of the skin over the teat (Fig. 2). The clinical signs were observed clearly with some scars on the teats (Fig. 3). The quality of the milk was not affected but the quantity was reduced due to presence of pain while milking and even in suckling.

Treatment and Discussion

In all the 14 cases brought to the Veterinary Dispensary suggestive of thelitis showed the clinical signs of swollen, soft teats and sloughing of skin over teats were noticed which was concurred with observations of Radostits *et al.* (2006) and Hanaa *et al.* (2011). The thelitis was mostly observed in primiparous animals than pluriparous animals as reported by Lokanadhamu *et al.* (2005). The incidence was found in the first lactation period of the animals within one week (12 case with 85.71%) followed by 10-15 days (2 cases with 14.28%). Similar observations with the incidence within 10 days of calving is 91.66% and in 15 days of calving in 8.33% (Kathirvel *et al.*, 2016). The incidence of thelitis was mainly observed in graded murrah buffaloes rather than in nondescriptive buffaloes (Rambabu *et al.*, 2011 and Kathirvel *et al.*, 2016). The animals affected were found to be more in single teat especially right hind teat. This observation was concurred with reportings of Sreedevi *et al.* (2002) that more than 80% of cases, the condition is limited to a single quarter and two quarter involvement may be seen in very much lower percentage of cases with the abnormal enlargement of udder and teats with gradual sloughing of the teats.

The samples were sent to Animal Disease Diagnostic Laboratory, Vijayawada for the identification of etiological factors along with antibiogram. These samples does not revealed any microbial findings except in those with skin sloughing found with *Candida albicans*. Which is in accordance with the finding of Vinod kumar *et al.* (2015).

Further, the 11 cases with swollen and soft teats were treated with enrofloxacin, antihistamine and Vit. ADE3 (Fig.04) and Supportive treatment was given by supplying with mineral mixture (Mastizyme) and probiotics (Trimast). Whereas 3 animals with skin sloughing were treated with streptopenicillins, antihistamine, Vit. ADE3 along with the candiderm ointment were obtained better results. Which is in agreement with the reports of Kathirvel *et al.* (2016). The swelling was reduced within 3-5 days but the skin sloughing was corrected in longer time. The scars over the teat mostly horizontal scars observed were treated with boric acid glycerine paste whereas the vertical scars were responded better by the application of copper sulphate solution.



Fig.01: Photograph of graded murrah buffalo showing swollen teat (Arrow).
Fig.02: Photograph of graded murrah buffalo showing sloughing of the skin (Arrow) over the teat.

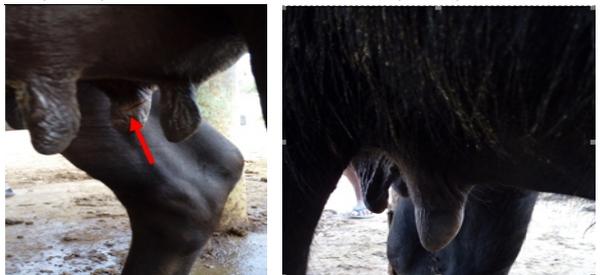


Fig.03: Photograph of graded murrah buffalo showing scars (Arrow) on the teats.
Fig.04: Photograph of graded murrah buffalo showing response to the Enrofloxacin treatment.

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