

Therapeutic Management of Mastitis in Buffaloes

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Abstract: In present study, case was presented to VCC, C.V.Sc., Korutla with complaint of swelling of right teat, decreased milk production. Milk sample watery in consistency with whitish yellow clots. On cultural examination shows positive for staphylococcus spp. and antibiotic sensitivity test results shows sensitive for antibiotic ceftriaxone. Therapy was started with antibiotic ceftriaxone @ 10 mg/kg bwt along with anti-inflammatory drug meloxicam 0.2mg/kg body weight. After two days of treatment buffalo was responded to the treatment and observed decreased swelling in of teat and udder. After 7 days of therapy buffalo showed complete recovery.

Keywords: Mastitis, Buffaloes, Ceftriaxone, Meloxicam

1. Introduction

Mastitis is a common disease entity of dairy cows, accompanied by physical, chemical, pathological and bacteriological changes in milk and glandular tissue (Samad, 2008)

Staphylococcus sp. is the main aetiological agents of clinical and subclinical mastitis in cows while, S. aureus and Escherichia coli are most commonly isolated pathogen from the clinical mastitis, coagulase negative Staphylococci are the most frequently isolated pathogens from the subclinical cows mastitis (Contreras *et al.*, 2003 and tufoni *et al* 2012). Predisposing factors such as poor management and hygiene, teat injuries and faulty milking machines are known to hasten the entry of infectious agents and the course of the disease (Majic *et al.*, 1993). The signs of loss of milk yield and severe inflammatory swelling of udder indicated acute type of mastitis.

2. Case history and Clinical Examination

An six-years-old Murrah buffalo yielding 9 lt milk/day and weighing approximate 350 kg, was brought to Veterinary Clinical Complex, College of Veterinary Science, Korutla with a history of a sudden drop in milk yield and severe painful swelling of right hind quarter of udder. As reported by the owner, all other three quarters of the animal had been normal, only right rear quarter was swollen severely.

On palpation of the right hind quarter of udder shows change in shape, increased size by swelling, hard in consistency, hot and pain on touch (Figure 1). Milk from the affected quarters was yellow in color and with clots or flakes. Collected milk sample for cultural and Antibiotic sensitivity test studies.

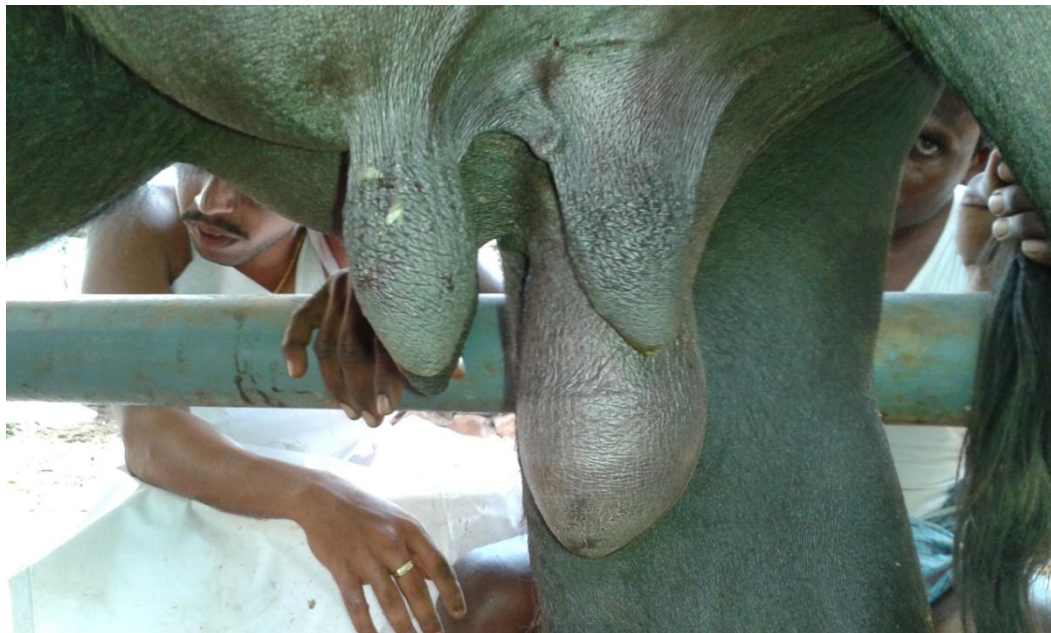


Figure 1: Swelling of right hind quarter of udder

3. Treatment and Discussion

Milk samples from affected quarter were found positive to cultural test *Staphylococcus aureus* and more sensitive to

ceftriaxone antibiotic. After confirmation the animal was treated with inj. Ceftriaxone (Intacef) 10 mg per kg body weight per day for 7 days intramuscularly. Inj. Meloxicum (Melonex) 0.2 mg per kg body weight subcutaneously was given for 5 days as anti-inflammatory drug. The owner was

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also advised to perform complete frequent milking at every 4-5 hours.

From the second day of treatment, the animal showed improvement, and on the eight day, it was completely recovered with complete disappearance of clinical signs; the milk was clear, free from clots or flakes, and white in colour. Therefore, when these organisms get the opportunity during trauma or injury to udder, improper milking technique and unhygienic condition, they enter the teat canal and mastitis develops. The signs of loss of milk yield and severe inflammatory swelling of udder indicated acute type of mastitis. Similar signs were also reported by (Neelesh Sharma, 2007 and Chakarbarti, 2017) in mastitis. The high cure rate by ceftriaxone after intramuscular administration may be due to the high bio-availability and high tissue concentration (Patil *et al.*, 2008). Inj meloxicam (Melonex) was used as anti-inflammatory drug for fast relief of udder swelling (Dougall *et al* 2016). The owner was also advised to give mineral mixture supplementation because some trace minerals enhance the mammary (cellular) defense mechanism. Hence, in the present study, the administration of ceftriaxone helped in the quick recovery of this clinical case of mastitis.

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