

*Short Communication*

## MASTITIS IN A FEMALE CALF - CASE REPORT

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Mastitis in lactating cattle is a common problem with considerable economic importance. But the report of mastitis in calves within four months of age is rare.

A female crossbred calf aged about 120 days was brought to Block animal Health Centre, Beldanga II Development Block, Murshidabad district, West Bengal with a history of swelling and enlargement of the udder for last seven days. The condition was unaffected after hot fomentation three to four times daily with luke-worm water.

The animal was found restless with reduced feed intake and having appx.50 kg. body weight. On palpation, the udder was found hot, enlarged, hard, reddish in colour with acute pain. No secretion, superficial lesions or any hard mass was detected inside the udder. The body temperature was found 104<sup>0</sup>F. No other abnormalities were detected during clinical examination. As there was no scope for collection of milk or tissue materials from the calf, laboratory confirmation was not possible.

The patient was primarily treated with Analgin with Paracetamol (500 mg+500 mg) twice daily orally for three days without any noticeable response. Then the animal was further treated with Ampicillin + Cloxacillin @ 500 mg twice daily intramuscularly for consecutive three days. The swelling and pain in the udder was gradually subsided. The body temperature was found normal (102.6<sup>0</sup>C). No other abnormality was detected even after six months of this treatment.

The term mastitis refers to inflammation of the mammary gland regardless of the causes (Blood *et al.*1983). Few workers have been reported that udder of nonbred / nonestrus calves may become swollen and enlarged due to development of udder tissue (Roberts 1982) and even with lactation (Roberts 1982, Pattanayak 2008). Traditionally heifers, calves and primiparae, were considered as free from mastitis. Without appreciable lacteal secretion, there is reduced nutrient fluid available to support growth of intra-mammary pathogens.

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**Fig 1. Calf showing enlarged udder before treatment.**



**Fig 2. Calf showing udder of normal size after treatment.**

During the last 20 years there have been numerous investigations describing the nature of mastitis in heifers and thus the dogma that heifers are free of this disease has been challenged (Fox 2009). Generally, the pathogens that cause mastitis in heifers are the same as those that cause infections in the older cows (Stephen Paul Oliver *et al.* 2005, Fox 2009). Unbred heifers had a higher percentage of infected mammary quarters compared with the overall mean for pregnant heifers (Trinidad *et al.* 1990). Infection of heifer mammary glands by pathogens can occur at a very early age and some of these infections may impair mammary growth and development but influence future milk production. The three most common

species of bacteria isolated from unbred and pregnant heifer's mammary gland were *Staphylococcus chromogenes*, *Staphylococcus hyicus* and *Staphylococcus aureus* (Trinidad *et al.* 1990).

The case may not be considered as udder oedema, as the animal showed no response to hot fomentation on the effected part followed by oral medication with nonsteroidal anti-inflammatory drugs. But it was responsive to the treatment with antibiotics perenterally. According to the history, clinical observation and drug response, the case may be considered as calf mastitis due to bacterial infection.

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