

*Short Communication***Prevalence of Mastitis in Goats****Vandna Bhanot¹, O P Mehla², Kamaldeep³ and Rajnish Kumar⁴**Disease Investigation Laboratory
Lala Lajpat Rai University of Veterinary and Animal Sciences,
Near Court Road, Ambala City -134 003 (Haryana)**INTRODUCTION**

Mastitis is an inflammation in the udder and can occur in any lactating animal. Even non lactating animals can harbour this infection. Goats can have variety of symptoms or none at all. Any abnormality in milk may signal mastitis: clotted, stringy, bloody, off colour, off flavour, and reduced production. Mastitis in goats occurs throughout the year both in clinical and subclinical forms in sporadic outbreaks in livestock farms (Ameh *et al*, 1993). In clinical mastitis, there are changes in milk colour, clots are present in the milk, and there are large numbers of leukocytes in the milk. Swelling, heat, pain, and indurations may be observed in the mammary gland in clinical cases; these symptoms can be detected by visual observation of the udder. In subclinical mastitis, there are no clinical signs of disease other than an increased somatic cell count in the milk, the presence of pathogenic organisms in the milk, and an inflammatory response that can only be detected by screening or laboratory tests. Obviously subclinical mastitis is one of the most important infectious diseases in small ruminants. Furthermore, subclinical mastitis represents a constant risk of infection for the whole stock. As there is a need for higher milk yields and more stringent requirements on milk quality in dairy goat herds, udder infections must be prevented or detected at an early stage not only to protect the farmer but rather the consumer. Moreover, the greatest problem in the treatment

and control of mastitis is the emergence of drug resistance due to indiscriminate use of antibacterial drugs. This paper describes prevalence of clinical and sub-clinical mastitis in goats in Ambala district of Haryana.

MATERIALS AND METHODS**Study animal**

The study was undertaken in different villages of district Ambala. The study animals were randomly selected lactating goats in the district. The study involved 186 (65 Beetal cross, 36 Jamunapari and 85 Non-descript) randomly selected lactating goats in the district. Milk samples from animals were collected aseptically. The first few streams of milk were discarded and about 10 ml milk samples were collected in sterile tubes, labelled as L or R (L for left halves and R for right halves). The milk samples were transported in an ice box with ice to the laboratory.

Assessment of clinical and sub-clinical mastitis:

Clinical mastitis was assessed by palpation and visualization of the udder, and diagnosed if the udder was red, hard, or hot to touch. Mild Clinical Mastitis was judged visually by slight or moderate swelling, indurations of one or more quarters, and a visibly abnormal secretion, including clots, revealed by the use of a strip-cup.

Corresponding Author's Email : opmehla56@gmail.com¹Asstt. Disease Investigation Officer, LUVAS, Ambala City²Senior Scientist, LUVAS, Ambala City³Veterinary Surgeon, Ambala City ⁴Veterinary Surgeon, Ambala City

Sub-clinical mastitis

Sub-clinical mastitis was assessed by the California mastitis test (CMT) using 15 per cent Teepol. Briefly, in each well of the test plate, 2 ml of milk was stripped from individual teats and an equal amount (2 ml) of 15 per cent Teepol was added to the milk. A circular motion was made with the plate for 10 seconds to mix the reagent and milk, and after 20 seconds, changes in the milk were observed. The formation of milk clots upon addition of the reagent was recorded.

RESULTS AND DISCUSSION

In the present study, overall prevalence of mastitis in goat was recorded 136 (73.1%). Clinical mastitis was detected in 12 (6.4%) of the lactating goats and subclinical mastitis 124 (66.6%) in lactating goats. The low level of clinical mastitis may be partly associated with the fact that dairy goats with clinically observable mastitis are either treated or culled. The results were in close agreement with Bawaskar *et al* (2011). However, in present study, higher incidence were observed than those reported by Yadav *et al* (1982) and White and Hinkley (1999) whereas, these findings were at a lowered degree than those reported by Swarup and Prabhudas (1985) and El-Idrissi *et al* (1994). The observation was further classified as follows: Breed wise 39 (60%) Beetel cross 19 (52%) and Jamunapari 66 (77.6%). Nondescript breeds were found positive for subclinical mastitis. Lactation

wise high prevalence of subclinical mastitis was recorded in third lactation 65 (52.4%) followed by second (28.2%) and first (19.3%).

CONCLUSION

The overall prevalence of mastitis in goat was recorded 136 (73.1%). Non-descript breeds were more prone as compared to Beetel cross and Jamunapari. The occurrence of subclinical mastitis increased with increase in lactation. The maximum incidence of lactation was found in third lactation.

REFERENCES

- Ameh J A, Addo P B, Adekeye J Q and Gyang E Q (1993). Prevalence of clinical mastitis and of intra mammary infections in Nigerian goats. *Preventive Vet Med* 7:41-46.
- Bawaskar S S, Rajguru D N, Gajarlawar S J and Tembhrune R D (2011). Subclinical mastitis in Goats. *Indian Vet J* 88(9):109-110.
- El Idrissi A H, Benikirane A and Zardoune M (1994). Studies on subclinical mastitis in caprine dairy herds in Morocco. *Revue d' Elevage et de Medicine Veterinaire des pays tropicaux*.47:285-287.
- Swarup D and Prabhudas K (1985). A note on occurrence and treatment of Staphylococcus aureus subclinical amastitis in cows and goats. *Indian J Vet Med* 5:33-39.
- White E C and Hinkley L S (1999). Prevalence of mastitis pathogen in goat milk. *Small Ruminant Res* 33:117-121.
- Yadav J S, Sharma K N and Mathur P D (1982). Note on bacteria associated with caprine mastitis and their antibiograms. *Indian J Anim Sci* 52:465-467.

Received on 18/05/2017

Accepted on 20/06/2017