Haryana Vet. (March, 2023) **62(SI),** 93-94 ISSN 0033-4359 (P) **Short Communication**

RETROSPECTIVE ANALYSIS OF VARIOUS UDDER AND TEAT AFFECTIONS IN GOATS

A.H. PARAY, J.J. PARMAR[1], P.B. DABHI and P.V. PARIKH
Department of Veterinary Surgery and Radiology, [1]Department of Veterinary Clinical Complex,
College of Veterinary Science and Animal Husbandry, Anand Agricultural University, Anand-388001, India

Received: 16.09.2021; Accepted: 28.10.2021

SUMMARY

Retrospective analysis of 5358 goats which were registered at VCC during January 2018 to December 2019 revealed 1421 (26.52%) were the cases of surgical affections and 3937 (73.47%) were medicinal cases included the gynaecological affections as per their diseased conditions and treatment. Total 179 goats were affected with various affections of teat and udder were presented during this period. Among them the incidence of udder affections was found to be higher 107 (59.78%) than the teat affections 72 (40.22%) in goats. The affections of the udder comprises of the non-surgical affection *i.e.* mastitis in 58 (32.40%) followed by gangrenous mastitis in 14 (7.82%), fibrosis of udder in 13 (7.26%), wounds on udder in 10 (5.58%), oedema of udder in 09 (5.02%) and udder abscess in 03 (1.67%) in goats while the incidence of teat affections comprises of teat fistula in 37 (20.67%) followed by thelitis in 11 (6.14%), teat obstruction in 09 (5.02%), teat lacerations in 08 (4.47%) and growth on teat 07 (3.91%) in goats. The distribution of overall affections of udder and teat in goats was highest in 3-4 year age group (n=60, 33.50%). The seasonal distribution of various affections of udder and teat revealed the udder affections were observed higher in winter season (n=31, 17.32%) while the teat affections were higher 17.32% (n=31) in pre-monsoon.

Keywords: Goat, Retrospective analysis, Teat, Udder

How to cite: Paray, A.H., Parmar, J.J., Dabhi, P.B. and Parikh, P.V. (2023). Retrospective analysis of various udder and teat affections in goats. *Haryana Vet.* **62(SI)**: 93-94.

As per 20th Livestock Cencus-2019, total population of goats was148.88 million contributing as 27.80% (approx.) of total livestock population of India and 4.87 million in Gujarat contributing as 18.12% of total livestock population. According to Basic Animal Husbandry Statistics-2019 (2019), 3% milk production was contributed by goat milk from 187.75 million tonnes during 2018-2019. Any clinical affections of udder and teat causes great economic loss to poor farmers. The work on various affections of udder and teat in India is very merge, even the available literature regarding the same is very less documented, so in the present study the same is documented scientifically.

The retrospective analysis of records pertaining to the cases presented for affections of udder and teat at Veterinary Clinical Complex, College of Veterinary Science and Animal Husbandry, Anand Agricultural University, Anand was carried out for the period from January-2018 to December-2019. The details of the results are presented in Table 1.

A total of 5358 goats were registered for various affections under Veterinary Clinical Complex, among them 1421 (26.52%) were the cases of surgical affections and 3937 (73.47 %) were medicinal (non-surgical) cases for various affections. Among them 179 (3.34 %) goats were affected with various affections of udder and teat out of total cases of goats. The incidence of the udder affections was found to be higher 59.78 % (n=107) than the teat affections 40.22 % (n=72). The year wise distribution of affections of udder was 32.40 % (n=58) for the year 2018 and 27.37 % (n=49) for 2019 while affections of teats were higher 21.79 % (n=39) for the year 2018 and 18.43 % (n=33) for the year 2019.

In the present study udder and teat affections were 3.34 % in goats. In contrary to the findings of the present study, higher incidence was reported by Garg (1995) in Rajasthan, Chakrabarti *et al.* (2014) in Bihar and Ali *et al.* (2020) in Kuwait. This might be due to shorter duration of study periods and population of goat in particular geographic area.

The incidence of various affections of the udder and teat are presented in Table 2. In the present study mastitis and teat fistula found to be highest affections. The lower incidence of mastitis reported by Megersa *et al.* (2010) and Kotb *et al.* (2020) whereas similar findings for other affections by Chakrabarti *et al.* (2014) while Ali *et al.* (2020) reported higher udder gangrene and lower various teat affections. Garg (1995) reported teat fistula and teat obstruction as a major affection might be due to lactating udder is more prone to infection during lactating period and become more pendulous so the teat is also more prone to trauma by wire fencing or also interfere in locomotion and while sitting or lying down.

The distribution of overall affections of udder and teat in goats pertaining to the age was reported highest in 3-4-year age group (33.50%; n=60) followed by above 5-year age group 29.00% (n= 52), 4-5 year age group (22.90%; n=41), 2-3 year age group (8.3%; n=15) and lowest in 1-2 year age group (6.1%; n=11). The incidence of affections

*Corresponding author: jigneshparmar2000@gmail.com

Table 1

Overall incidence of udder and teat affections in goats from January 2018 to December 2019

Affections	Year 2018	Year 2019	Total
Surgical affections	770 (14.37%)	651 (12.15%)	1421 (26.52%)
Non-surgical affections	1954 (36.46%)	1983 (37.01%)	3937 (73.47%)
Total	2724 (50.84%)	2634 (49.16%)	5358 (100%)

Table 2

Incidence of various affections of udder and teat in goats

Affections of Udder	Year 2018	Year 2019	Total
Mastitis	32	26	58 (32.40%)
Gangrenous mastitis	06	08	14 (7.82%)
Fibrosis of udder	07	06	13 (7.26%)
Wounds on udder	07	03	10 (5.58%)
Oedema of udder	05	04	09 (5.02%)
Udder Abscess	01	02	03 (1.67%)
Total	58 (32.40%)	49 (27.37%)	107 (59.78%)
Affections of Teat			
Teat Fistula	20	17	37 (20.67%)
Thelitis	05	06	11 (6.14%)
Teat Obstruction	03	06	09 (5.02%)
Teat Laceration	06	02	08 (4.47%)
Growth on Teats	05	02	07 (3.91%)
Total	39 (21.79%)	33 (18.43%)	72 (40.22%)
Grand Total	97	82	179

of udder was higher (20.67%; n=37) in 3-4 year age group followed by 16.75% (n=30) in above 5 year age group, 12.29% (n=22) in 4-5 year age group, 5.58% (n=10) in 2-3 year age group and 4.46% (n=8) in 1-2 year age group whereas incidence of affections of teat in goats was highest 12.84% (n=23) for 3-4 year age group followed by 12.29% (n=22) for age group of above 5 year age, 10.61% (n=19) goats from 4-5 year age group, 2.79% (n=05) goats from 2-3 year age groups and 1.67% (n=03) goats from 1-2 year age group.

The seasonal distribution of various affections of udder and teat in goats presented in Table 3. In the present study the incidence of udder and teat affections as overall and individual found to be highest in age group of 3-4 years and also in winter season. Garg (1995) also reported the udder and teat affections were highest in age group 4-5 years followed by in animals above 5 years and obstruction of teat higher in 3-4 years and minimum (10.53%) in 2-3 years age groupwhich are similar to the present study. Chakrabarti *et al.* (2014) reported highest incidence in lactating animals than non-lactating animals and in

Table 3

Season wise distribution of various affections of udder and teat in goats from January 2018 to December 2019

Affections of Udder		Year 2018	Year 2019	Total
Seasons	Pre-monsoon	06	21	27 (15.08%)
	Monsoon	18	07	25 (13.97%)
	Post-monsoon	09	15	24 (13.40%)
	Winter	25	06	31 (17.32%)
Total		58	49	107 (59.78%)
Affections of Teat				
Seasons	Pre-monsoon	11	20	31 (17.32%)
	Monsoon	10	03	13 (7.26%)
	Post-monsoon	06	04	10 (5.59%)
	Winter	12	06	18 (10.05%)
Total		39	33	72 (40.22%)
Grand Total		97	82	179

monsoon months. due to improper drainage systems at many places.

The incidence of the udder affections found to be higher than the teat affections in goats. Among various affections of the udder comprises of the mastitis was reported highest amongst overall affections of udder and teat fistula was found to be highest among the teat affections. The distribution of overall affections of udder and teat in goats pertaining to the age was reported highest in 3-4 year age group. The udder affections were observed higher in winter season as comprised to other seasons.

REFERENCES

Ali, K. Farghali, H.A.M.A. and Shamaa, A.A.E. (2020). Udder and teat surgical affections in sheep and goats in state of Kuwait. *Int. J. Natl. Soc. Sci.* **7(3)**: 94-99.

Chakrabarti, A., Chandran, P.C., Kumar, P. and Dey, A. (2014). Teat and udder disorders in goats (*Capra hircus*) in Bihar, India. *S. Asian J. Life Sci.* **2(2)**: 20-22.

Garg, R. (1995). A surgico-clinical study on teat and udder affections of Marwari goats (*Capra hircus*). M.V.Sc. thesis submitted to Rajasthan Agricultural University, Bikaner.

Kotb, E.E.Z., Fadel, M., Abd El-Fattah, O.A., Azab, A.M.S. and Leil, A.Z.A. (2020). Ultrasonography, histopathological udder alterations and bacteriological investigations for diagnosis of mastitic goats. *J. Appl. Vet. Sci.* **5(2)**: 77-86.

Megersa, B., Tadesse, C., Abunna, F., Regassa, A., Mekibib, B. and Debela, E. (2010). Occurrence of mastitis and associated risk factors in lactating goats under pastoral management in Borana, Southern Ethiopia. *Trop. Anim. Heal. Prod.* **42(6)**: 1249-1255.

20th Livestock Census-2019. Ministry of Agriculture Department of Animal Husbandry, Dairying and Fisheries. http://dadf.gov.in/sites/default/filess/20th Livestock census-2019 All India Report.pdf