## **Short communication**

# EPIDEMIOLOGICAL STUDIES ON INTERDIGITAL HYPERPLASIA IN CATTLE IN NORTH GUJARAT AND SAURASHTRA REGION OF GUJARAT STATE.

R. K. Gosai , P. H. Tank, B. N. Parmar and H. D. Thakkar Department of Veterinary surgery and radiologyCollege of Veterinary Science and Animal Husbandry Anand Agricultural University, Anand- 388001

Email: rohitdr89@gmail.com

Received 28-6-2013 Accepted 18-8-2013

The interdigital hyperplasia is an overgrowth of skin fold adjacent to axial hoof wall. It can occur in one or more limbs, although hind limb affected more frequently than forelimb (Singh and Singh, 1995). Dermatitis, poor claw conformation, incorrect claw trimming and interdigital phlegmon predispose cows to hyperplasia (Manske, 2002). The present study was undertaken to know the clinical epidemiological status of interdigital hyperplasia in cattle of North Gujarat and Saurashtra region of Gujarat State.

## MARERIALS AND METHODS

The study was conducted on cattle of Panjarapoles and Gaushalas belongs to North Gujarat and Saurashtra regions of Gujarat State. A total of 8495 cattle (4983 males, 3512 females) were surveyed to know the status of interdigital hyperplasia in cattle. Data were collected on the basis of age, breed and sex.

#### **RESULTS AND DISCUSSION**

The incidence of interdigital hyperplasia was 0.49 per cent of (42 out of 8495) the total surveyed animals. This finding was in accordance with those observed by Jean *et al.* (2004) in bovine.

The incidence of interdigital hyperplasia was not observed in cattle upto 3 years of age, only a small percentage (0.12 %) was observed in cattle between 4-6 years of age, the incidence increased to 0.48 % and 1.20 % in cattle between age 7-9 years and 10-12 years respectively followed by a slight decrease (1.073%) in the cattle of 13-15 years of age. Highest interdigital hyperplasia was seen in cattle between the ages of 10-12 years. This might be due to the fact that 10-12 years of male cattle were used more for drought purpose. Occurrence of FMD leads to secondary bacterial infection and cause interdigital hyperplasia. Further, inappropriate wear and tear of claws predisposed with faulty conformation of digit have also been considered as one of the reason for occurrence of interdigital hyperplasia (Greenough *et al.*, 1981).

In the present clinical study, incidence of interdigital hyperplasia was found higher in Kankrej (0.70%) than the Gir cattle (0.30%) ,no incidence was observed in other breeds (such as cross bred , exotic (pure) and non descript breeds ). The incidence of interdigital hyperplasia was higher in the males 36(0.72%) than the females 6(0.17%) . These findings corroborated well with the findings of Susan and Norm (2004). Bullocks are used for heavy drought work wherein due to exhaustive pressure on digital region leads to spreading and stretching of the interdigital space, which in turn might be predisposing the bullock for development of seat of inflammation to develop hyperplasia in future.

#### **REFERENCES**

Greenough, P. R.; MacCallum, F. J. and Weaver, A. D. (1981). Lameness in Cattle. 2<sup>nd</sup> Edn. John Wright and Sons Ltd., Bristol, England. pp:113-115.

INDIAN J. FIELD VET Vol. 9 No. 2

Jean, G. S., Desrochers Andre, L., Sussan, F.and Norm Ducharme.(2004) Farm Animal Surgery, 1st Ed, Technovit, Jorgensen Laboratories; Loveland, Co. p : 324.

Manske, T. (2002). Hoof Lesions and Lameness in Swedish Dairy Cattle. Prevalence, risk factors, effects of claw trimming, and consequences for productivity. Ph.D Thesis submitted to Swedish University of Agricultural Sciences Skara p.20.

Singh, A and Singh, S. (1995). Interdigital proliferation, In: Ruminant Surgery. Tyagi R.P.S. and Singh, J. (Ed.). 1st Edn. C.B.S Publishers and Distributors, Delhi. p. 155.

Susan, F and Norm, D. (2004) interdigital hyperplasia, FARM ANIMAL SURGERY. 1<sup>st</sup> Edn. Technovit, Jorgensen Laboratories; Loveland, Co : p: 324.