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PATTERN OF OCCURRENCE OF DERMATOSES IN CANINE POPULATION IN AND AROUND RANCHI

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Abstract: Of 170 dogs diagnosed as suffering from skin disorders in one year of study, 35.29% cases were of tick infestation and 18.82% cases were of sarcoptic mange. Dermatoses cases were minimized at winter and in subsequent months with increase in temperature, increased linearly. Occurrence of all kinds of ectoparasitic infestations was highest in the age group of 3 month to 6 years except lice infestation which was observed in all age group. Male dogs were more susceptible to the skin disorders than female ones and among all the breeds, spitz showed maximum susceptibility to all types of skin diseases.
Keywords: Dermatosis, occurrence, canine, ranchi.

Introduction:

Apart from general state of health, condition of skin also determines the aesthetic value, especially in pet animals. Dog's skin is susceptible to many ectoparasites some of which are very contagious and difficult to control. Self-inflicted injury caused by constant scratching in these animals leads to contamination with secondary bacterial or fungal infection and makes treatment difficult. Effects of environmental factors, breed, sex and age on occurrence of ectoparasitic skin diseases in dogs were studied and reported.

Materials and Methods:

Dogs reported with various skin problems and with symptoms like itching, alopecia, irritability, inappetance and skin lesions like erythema, keratinization were examined and recorded for a period of one year, from March, 2014 to February, 2015 in the Clinical Complex, Ranchi Veterinary College. Number of dogs suffered from various skin disorders were counted and categorized according to the age, sex, breed of the animals, month and season of disease occurrence and etiology of the disease. Skin scrapings from peripheral areas of the active lesions of the dogs suspected to be suffering from mite infestation was examined under microscope with 10% KOH solution to identify the etiologic agents as method of Soulsby, 1978.

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Results and Discussion

The dogs suffered from various skin disorders were diagnosed as of sarcoptic mange, demodectic mange, tick infestation and lice infestation mostly and of flea allergy, allergy, dermatophytosis, eczema and pyoderma occasionally. The tick infestation was major dermatological problem as maximum number of cases (35.29%) was found to harbour this ectoparasite. This was in agreement with the findings of Kumar *et. al*. (2006). The second major problem was of sarcoptic mange infestation (18.82%). Lice infestation ranked third (12.94%) in terms of number of affected dogs. The demodectic mange affected 5.88% of all dermatological problems. Verghese *et. al.* (1994) reported highest prevalence of flea bite dermatitis closely followed by Scabies and demodicosis. Lahkar *et. al.*, (2005) reported incidence of canine demodicosis in 11.89% of dogs. These variations in relative proportion of skin diseases may be due to the effect of different climatic condition in different region of study.

The dermatoses cases were directly proportional to the environmental temperature. In hot and humid months of the year, the cases of skin disease were abundant (36.00%). Dimri and Sharma (2004) have reported that in hot and humid months of the year the skin diseases were abundant. Tick infestation was more common in summer season (46.67%). According to the study of Kumar *et. al*. (*loc. cit*.), lice infestation is more common in winter and mite and tick infestation are common in summer season. Sarcoptic mange occurred throughout the year thus it may be described as non-seasonal disease. De Jaham and Henry (1995) also reported sarcoptic mange as a non-seasonal disease in temperate region. The cases of skin disorders of all types were peak in the rainy season (38.00%).

The sarcoptic mange was occasionally seen in pup below 3 months of age and above 6 years of age indicating that sarcoptic mange was more common in active dogs. The age wise susceptibility to demodectic mange and ticks also followed same pattern as in sarcoptic mange. However, lice infestation was observed in all age groups of dogs. Lahkar *et. al*. (loc. cit.) reported higher incidence of demodectic mange in the age group of 0 to 1 years while Sharma (2002) reported that dermatoses cases were observed more in active dogs (6 months to 2 years).

Male dogs suffered more from all type of skin disorders including sarcoptic mange, demodectic mange, ticks and lice infestations. The percentage of male dogs suffering ranged from 34% to 63%. Sarcoptic mange and demodectic mange affect higher percentage of

female than male dogs. Report of Dimri (1998) indicated sarcoptic and demodectic mange affected higher percentage of female than male dogs while Shah, 1994 opined that wandering and fighting habit causes male dogs more prone to demodicosis which is also influenced by hormonal levels.

The data showed that the spitz dogs were most susceptible (48.82%) to all skin diseases including ticks, lice and mange infestation. The native dogs ranked second (17.05%) in the susceptibility to mange and lice while German shepherd ranked third (15.29%). As per tick infestation is concerned, the German shepherd breed was second (20%) most susceptible. Jani *et. al*. (2004) found no breed-wise differences in incidence of demodicosis in canine population.

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