

Department of Veterinary Medicine
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Title of thesis	Studies on clinico-diagnostics of canine dermatological disorders and its management
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ABSTRACT

The present study was carried out on 2,671 dogs presented at Department of Veterinary Medicine, DGCN COVAS, Palampur over a period of one year two months. Among these, 227 dogs were diagnosed with different dermatological disorders indicating 8.40 per cent overall hospital prevalence. Etiology-wise prevalence were bacterial 34 per cent, demodectic mange 18 per cent, fungal 17.62 per cent, flea 16 per cent, sarcoptic mange 3.52 per cent, atopic, cheyletiellosis, nutritional 2.6 per cent respectively and pemphigus 1.7 per cent. The maximum cases of dermatitis were recorded during the monsoon season (46.69%) followed by the winter season (22.46%). Sex-wise the males (75.33%) suffered more than females (24.66%). Overall age groups with the highest prevalence were those between 1 and 12 months (39.20%). Overall skin affections were more in Mongrels breed (34.36%) and German shepherd (13.22%). Majority of canines had pruritis (80.62%), followed by alopecia (75.33%). In the case of bacterial dermatitis maximum number of dogs confronts erythema (89.74%) and in sarcoptic mange, demodectic mange, fungal dermatitis, and atopic dermatitis was characterized by pruritis 100, 95.12, 75.00, 83.33 per cent respectively. The maximum distribution of overall lesion on dorsal surfaces was seen in lumbar 56 (24.67%) and ventral surfaces on paw 60 (26.43%). Haemoglobin and HCT values reduced significantly in demodectic and sarcoptic mange. Significant leucocytosis was observed in sarcoptic mange, demodectic mange, bacterial and fungal dermatitis and significant lymphopenia observed in sarcoptic mange and bacterial dermatitis and lymphocytosis in fungal dermatitis. Neutropenia was observed significantly in fungal dermatitis. Eosinophilia was observed significantly in bacterial and fungal dermatitis. ALT was significantly higher in demodectic mange, sarcoptic mange, and bacterial dermatitis. AST was significantly higher in bacterial, fungal dermatitis, demodectic and sarcoptic mange. Hyperproteinaemia was observed in demodectic mange, sarcoptic mange, and fungal dermatitis. *Staphylococcus* spp. was most isolated bacteria and Amoxicillin-clavulanic acid, proved to be the most effective antibiotic in treatment of bacterial dermatitis with 57.14 per cent sensitivity on antibiogram followed by Clindamycin (42.86%). In treatment group-I (Ivermectin) on the 28th day, there was moderate erythema, alopecia, crust lesions, mild papular lesions, on the 56th day, there was mild alopecia and mild crust, and on the 84th day, there was complete recovery. All the dogs in treatment groups-II (Fluralaner), III(Sarolaner), IV(Afoxolaner) have severe erythema, alopecia, crust, and papule there was a reduction of clinical signs observed on day 28 there were mild erythema, alopecia, and crust lesions. Mild alopecia was observed on day 56. On day 84, all treatment groups had completely recovered. The mean mite count in group-I was significantly lower on the 28th day with the drug efficacy of 76.80 per cent and there was significant reduction of mean mite count was observed on 56th and 86th when compared with 28th day with the drug efficacy 99.68 per cent and 100 per cent respectively. In group-II, III and IV the mite count was significantly lower on 28th day when compared to the 0th day with the drug efficacy 98.90, 98.70 and 98.50 per cent respectively and non-significant reduction of mite count was observed on 56th day and 84th day in comparison to 28th day with a drug efficacy of 100 per cent. In sarcoptic mange infested dogs Fluralaner was administered @25mg/kg b.wt orally once to all dog. Complete resolution of signs was seen on 56th and 84th day. The mite count of Fluralaner treated dog was significantly lower on the 28th day with the drug efficacy 96.70 per cent.

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