

DERMATOLOGICAL DISORDERS IN DOGS IN UDAIPUR DISTRICT AND THEIR NUTRITIONAL MANAGEMENT

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Dermatological disorders are very common in dogs. These disorders not only cause discomfort but in many cases are responsible for serious conditions. Nutritional factors have a major role in the maintenance of healthy coat and skin, and are significant in the etiology and therapy of certain dermatological disorders. A study was conducted to find out the occurrence of various dermatological disorders in dogs and its nutritional management. Dermatological disorders were observed in 12 per cent of dogs examined. The response to nutritional supplement was recorded in all cases irrespective of the cause. Total 102 cases (81.6%) responded well to the nutritional supplement along with specific therapy. It proved the importance of protein, carbohydrates, fish oil, dried yeast, fructo-oligosaccharides, beta carotene, aloe vera, bromelain, vitamins and organic minerals in management of dermatological disorders in dogs.

Keywords: Dermatological disorders, Dogs, Udaipur, Nutritional management.

Dermatological disorders are very common in dogs. It has been reported that 25 to 75 per cent of the cases presented in dog hospitals have dermatological problems. This prevalence may vary from place to place. Overall, in dogs, allergic skin diseases, flea infestations, bacterial infections, anal sac problems and neoplasia have been reported as the most common dermatological conditions (Scott and Paradis, 1990). Nutritional factors have a major role in the maintenance of healthy coat and skin, and are important as predisposing factors and prevention of certain skin diseases. Nutritional deficiencies are very common as a result of the widespread feeding of incomplete and unbalanced pet foods. The purpose of this study was the nutritional management of such disorders in dogs in Udaipur District of Rajasthan..

Materials and Methods

Dogs presented in clinics and visited at households were examined for dermatological disorders. The inclusion criteria for the study were all dogs visited and being subjected to a dermatological examination as part of their clinical examination, regardless of original presenting history. The breed, sex and age of dogs' were recorded. Multiple skin scrapings were taken from all the dogs with a history of pruritis. Ecto-parasitic infestations were

diagnosed by clinical examination, coat brushings, hair plucks and skin scrapings. Other tests included biochemical and haematological investigations, endocrine function tests, impression smears etc. Pyoderma and/or *Malassezia* dermatitis were diagnosed using cytology and culture.

Response to nutritional supplements- Vet Pro (protein, carbohydrates, fish oil, dried yeast, fructo-oligosaccharides, beta carotene, aloe vera, bromelain, vitamins and organic minerals etc.) along with ivermectin and/or amitraz was used as a part of nutritional and therapeutic plan. In addition, microbial skin and ear infections were treated with topical and/or systemic antibiotics or antifungal therapy.

Results and Discussion

Nutritional supplements- Vet Pro (protein, carbohydrates, fish oil, dried yeast, fructo-oligosaccharides, beta carotene, aloe vera, bromelain, vitamins and organic minerals etc.) along with ivermectin and /or amitraz were used as a part of nutritional and therapeutic plan. In addition, microbial skin and ear infections were treated with topical and/or systemic antibiotics or antifungal therapy. The response to nutritional supplement was recorded in all cases irrespective of the cause. Total 102 cases

(81.6%) responded very well to the nutritional supplement along with specific therapy. It proved the importance of protein, carbohydrates, fish oil, dried yeast, fructo-oligosaccharides, beta carotene, aloe vera, bromelain, vitamins and organic minerals in the dermatological disorders in dogs. Skin has an active metabolism and high demand for skin related nutrients. The increased levels of the poly unsaturated fatty acids, vitamins, proteins, organic zinc and selenium helped to support a healthy skin and coat as also reported by Scott *et al.*, 2001.

Highly digestible selected source of proteins and carbohydrates are useful to avoid possible food sensitivity. Synergistic combination of anti-oxidants improved skin barrier and health. Optimum levels of omega 3 and omega 6 fatty acids are very much important for healthy skin and coat. Added organic zinc and selenium, aloe vera extract and bromelain provided natural skin defence and promote healing as also mentioned by Kunkle, 1980 and Scott *et al.*, 1995. Nutritional interventions have a major role in the maintenance of healthy skin, and are important in the etiology and management of certain dermatological disorders. Nutritional deficiencies are common as a result of the feeding of incomplete and unbalanced dog foods. Deficiencies of polyunsaturated fatty acids, zinc and vitamins are very common. Attention should be given to the nutritional value of polyunsaturated fatty acid

supplements in the management of dermatological conditions particularly which are associated with allergic conditions or keratinization defects. Studies have demonstrated benefits of fatty acids in the management of pruritic dermatological disorders. There are also preliminary experimental evidences that specific dietary fatty ratios are useful in the nutritional management of inflammatory diseases as also narrated by Bauer, 1997.

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