RESEARCH NOTE

CLINICAL EVALUATION OF IVERMECTIN FOR TREATMENT OF CANINE SCABIES

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Efficacy of Ivermectin (Ivomec-R¡ MSD) was evaluated against naturally infested sarcoptic mange in 20 dogs. It cured all cases of sarcoptic mange when given subcutaneously at the rate of 0.2 mg/kg body weight. No side effects were observed with Ivermectin.

INTRODUCTION

Canine scabies is an extremely pruritic and contagious skin condition caused by epidermal mite, *Sarcoptes scabiei* var. *canis* (Prescott, 1970). The disease is spread from dog to dog by direct contact. People become infested in about 50% of canine cases, however, the dermatosis in people usually dissipates spontaneously 2-4 weeks after the animal is treated (Folz *et al.,* 1984). Clinical signs include intense pruritis, erythema, papular eruptions, accumulation of keratotic tissue and alopecia of the affected areas. Severely affected dogs may have open lesions caused by scratching. Scabies lesions are mostly seen in the muzzle, chest, elbows, around the eyes and on the ears and then spread to back and abdomen.

Keeping in view the importance of this disease, the affected dogs were treated with a new product i.e. Ivermectin which is equally effective against ecto- and endoparasites. The purpose of the present study was to observe the efficacy of Ivermectin against scabies in dogs.

MATERIALS AND METHODS

A total of 104 dogs showing signs of pruritis and alopecia brought to the outdoor clinic of the Department of Veterinary Clinical Medicine and Surgery, University of Agriculture, Faisalabad were examined for the presence of sarcoptic mites. Of these, 20 dogs (of either sex and varying age groups) positive for sarcoptic mites, were selected for trials. The most prevalent breeds were Alsatians and Cocker spaniels.

Scabicide used: Ivermectin (Ivomec) a product of MSD AgVet, Division of Merck Sharp Dhome, Holland, a derivative of the avermectin macrolytic lactone, produced from *Streptomyces avermectin* (Campbell, 1981). Ivermectin was given subcutaneously at the dose rate of 0.2 mg/kg body weight.

Assessment criteria: For exposing sarcoptic mites, deeper skin scrapings were taken with scalpel blade until the capillary bleeding started oozing (Baker, 1970). The scrapings were processed as per technique used by Magree (1974) and were examined microscopically on zero, 7th, 15th and 21st day after treatment. Negative skin scrapings, subsidence of lesions, stopping of itching and smoothening of skin coat were taken as

Table 1. Efficacy of Ivermectin against sarcoptic mites in dogs

Drug used and its dose rate	Number of animals at day 0	Animals cured		
		7th day	15th day	21st day
Ivermectin 0.2 mg/kg b.w.	20	12 (60%)	18 (90%)	20 (100%)

criteria to evaluate the efficacy of Ivermectin. Side effects of the drug were also kept in view.

RESULTS AND DISCUSSION

All the dogs recovered from scabies were found with smooth skin without any lesion. Signs of itching were also absent in these dogs. No side effects were observed after treatment with Ivermectin. The results of the skin scrappings observed microscopically at various intervals before and after the treatment with Ivermectin are presented in Table 1.

Ivermectin at the rate of 0.2 mg/kg body weight against scabies was found to be 60%, 90% and 100% effective after 7th, 15th and 21st day. Results of the present study are in close agreement with many workers. Burgos and Huici (1984) reported that Ivermectin at the rate of 0.2 mg/kg body weight is 98% effective against sarcoptic mites. It is recommended that Ivermectin if given at the rate of 0.2 mg/kg body weight will prove useful for canine scabies. Similar results were also reported by Scheidt *et al.* (1984).

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