

International Journal of Advanced Biochemistry Research



ISSN Print: 2617-4693
 ISSN Online: 2617-4707
 IJABR 2024; 8(1): 349-351
www.biochemjournal.com
 Received: 17-11-2023
 Accepted: 29-12-2023

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Successful treatment of demodicosis with fluralanar in dogs

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DOI: <https://doi.org/10.33545/26174693.2024.v8.i1e.377>

Abstract

Eight dog were presented in veterinary clinical complex, PGIVER, Jaipur with history of severe itching, alopecia, hair loss and erythematous crusts all over the body for the past 1 to 2.5 months. On clinical examination, lesions found all over the face, abdominal area, over the spinal area and legs. Dogs were treated with many injectable and topically powder/liquid but no response to skin problems. During deep skin scraping of all dogs revealed presence of *Demodex canis* mites in microscope. The dogs were treated with fluralanar (Bravecto, MSD Animal Health India), antibiotic tablet, immune booster and omega 3 and omega 6 syrup. The dogs are partial recovered after one month but full recovered uneventfully in 2 months.

Keywords: Demodex, itching, scraping, Fluralanar

Introduction

Demodex is continue to pose problems for all dog lovers and veterinarians. (Sakina and Mandial, 2011) [5]. Demodicosis is also known as demodectic mange, follicular mange or red mange can be defined as an inflammatory, non-contagious parasitic dermatosis caused by overpopulation of the host specific follicular mites of various *Demodex* spceies (Shrestha *et al.*, 2015) [7]. Demodicosis is one of the major contagious skin diseases in all age group of dog because mites accumulate in the hair follicle, sebaceous glands of the skin. Exists in localized and generalized forms (Sivajothi *et al.*, 2015) [8]. Huge population of dogs regularly appearing with various dermatological disorder. The most common dermatological problems came in notice with itching, alopecia, scaling, pustules, pruritis, crusting and otitis etc. Out of which many of dogs were found affected with demodectic mange infection. Limited options of the treatment of the mites are available. Various cases has been detected which found resistant to conventional allopathic drugs.

History and observation

Eight dog were presented in veterinary clinical complex, PGIVER, Jaipur with history of severe itching, alopecia, hair loss and erythematous crusts all over the body for the past 1 to 2.5 months On clinical examination in all dogs, lesions found all over the face, abdominal area, over the spinal area and legs. Dogs were treated with many injectable and topically powder/liquid but no response to skin problems. Skin scraping of all dogs was taken deeply and examined under microscope (40x) using oil immersion over the scrapping on slide. It revealed the presence of *Demodex canis* mites.

Treatment

Therapeutic approach had been the challenging task, since demodicosis was very complicated with the secondary bacterial infection. Dogs were treated with Fluralanar (Bravecto) orally once. Adjunctive therapy of *Cefpodoxime proxetil* tablet @ 5-10 mg orally for the treatment of secondary bacterial infection. Immune booster medicine (Advamun) @ 1 teaspoon twice a day, orally and omega 3 and omega 6 (Sancoat @ 7.5 ml) supplements orally for 1 month. The dog is spartial recovered after month but full recovered in 2 months.



Fig 1: Hair loss condition (on 0 day)



Fig 2: Erythematous crusts present in whole over body surface (on 0 day)



Fig 3: *Demodex canis* in microscope examination (40x)



Fig 4: Partial hair growth condition after treatment (on one month)



Fig 5: Fully hair growth after treatment (on after 2 month)

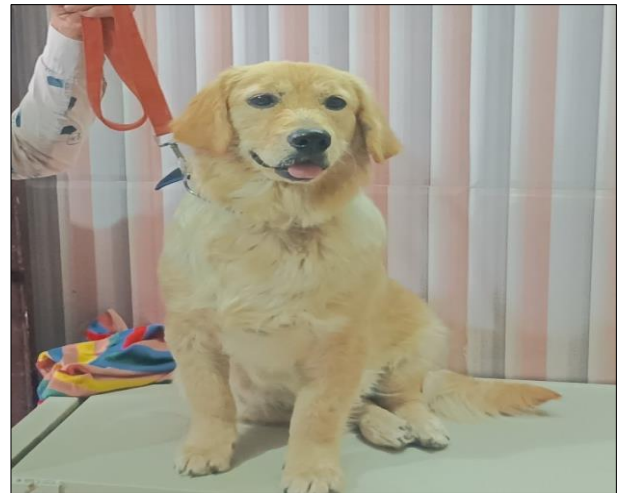


Fig 6: Normal skin condition after treatment (on 2 month)

Discussion

In this cases, the most consistent clinical signs in patients with demodicosis were erythema, itching and alopecia, scaling of the skin but when there is a secondary bacterial infection it produces pustular discharges and crust formation over the lesions. These signs were recorded in previous research on canine demodicosis (Scott *et al.*, 2001, Mederle *et al.*, 2010) [6, 2]. Canine demodicosis is a major ectoparasitic skin infection due to demodex species, with *Demodex canis* mites being the most common cause. Fluralanar 500 mg (Bravecto) is a modern medicine against demodicosis. Fluralanar administered once as chewable tablet is not only effective against Demodex species mites on dogs and also remains effective for 12 weeks following treatment. It is also effective for same period to time against ticks and fleas that may concomitantly infest these animals, in agreement to this, Petersen *et al.*, 2020 [3], Rohdich *et al.*, 2022 [4], Dhuria *et al.* 2022 [1] suggested efficacy of fluralanar tablet against various ectoparasites of the dogs. The most common side effects of the tablets in dogs are mild and short- lived diarrhea, vomiting, lack of appetite and drooling.

Conclusion

In this cases, the dogs were treated with fluralanar with supportive medicine antibiotic, immune booster and omega 3 and omega 6. These observations concluded that fluralanar is a single time orally administered effective alternate for the treatment of generalized canine demodicosis. Immune

booster and nutritional supplement also given alongside for the betterment of the skin. The dogs recovered uneventfully in 2 months.

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