Indian J. Vet. Public Hlth. 2021 7 (2) : 48-50

Therapeutic Management of Scabies in Rabbits with Selamectin – A Case Study

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Received : January 2021 **Accepted : May 2021** **Published : June 2021**

Abstract

Ten adult rabbits presented with the complaint of anorexia, alopecia, intense pruritus and dry crust like lesions over the ears, face and legs formed the study group. On clinical examination intense pruritus, erythema, dandruff, yellowish white indurated dry crust like lesions on ears, nose, face and paws were noticed. Microscopic examination of skin scrapings revealed *Sarcoptes scabiei* mites with eggs. Two doses of selamectin spot on were used once in two weeks. Complete clinical recovery noticed in all the rabbits confirmed the efficacy of selamectin.

Key words: Sarcoptic mange, Rabbit, Selamectin, Spot on

Introduction

Sarcoptic mange infestation due to *Sarcoptes scabiei* is one of the most common and major constraint in rabbit production in India (Darzi *et al.,* 2007). Overcrowded living conditions and poor hygiene are significant factors for infection with *Sarcoptes scabiei* mites (McCarthy, 2004). *Sarcoptes scabiei* causes infestation which affects ears, nose, feet and areas around genitalia; it also causes pyoderma and itching. Sarcoptic mange, if left untreated may cause significant morbidity and economic losses in livestock. The present study describes the therapeutic management of scabies with selamectin spot on in rabbits.

Case history and observations

Ten adult rabbits were presented to Veterinary Clinical Complex, Veterinary College and Research Institute, Namakkal with the history of anorexia, alopecia, intense pruritus and dry crust like lesions over the face and ears. Clinical examination revealed yellowish to white crust like lesions distributed in the head, ears, nose, face, legs and areas around genetalia (Fig. 1 & 2). Microscopic examination of skin scrapings collected from various lesions revealed *Sarcoptes scabiei* mites with eggs on low power (10x) (Fig. 3). History, clinical and microscopic examination of skin scrapings confirmed that the rabbits were manifested with *Sarcoptes scabiei* mites.

Treatment and Discussion

All the rabbits were treated with two doses of selamectin spot on preparation once in two weeks. Remission of crusts and itching were noticed after 7 days of therapy. Examination of skin scrapings after four weeks of therapy revealed complete absence of *Sarcoptes scabiei* on low power microscopy.

Mange infestation caused by *Sarcoptes scabiei* is common in rabbits, which is characterized by presence or absence of pruritis, specific morphology of mite and pattern of lesion distribution (Bhardwaj *et al.,* 2012). *Sarcoptes scabiei var. cuniculi*, a burrowing mite is commonly found in India. Typical lesions include tan to yellow, often powdery crusts, alopecia, erythema and excoriation on the muzzle, lips, bridge of the nose, eyelids, head, margins of the pinna, paws and the external genitalia with intense pruritus (Kachhawa *et al.,* 2013). Prakash *et al.* (2017) found mange lesions on the edges of ears, nose, face and legs in rabbits with scabies. The lesions characterized by loss of hair, thickening of the skin, dirty crusted irregular raised dried scabs with erythema and disfigured face and ear. Clinical signs observed in the present study were in concurrence with the above authors. Sasikala and Kumari (2018) confirmed *Sarcoptes spp.* with skin scrapings collected from multiple sites. Adult parasites of *Sarcoptes spp.* and their ova with faeces were observed in low power microscopy in their study. Similarly, rabbits were confirmed for scabies as noted by the above authors. Selamectin spot on was found to be effective in rabbits with pulicosis, scabies and cheyletiellosis (Fisher *et al.,* 2007; Mellgren and Bergvall, 2008).

Conclusions

Improvement in feeding habit, absence of itching and lesions confirmed the efficacy of selamectin spot on in rabbits with scabies.

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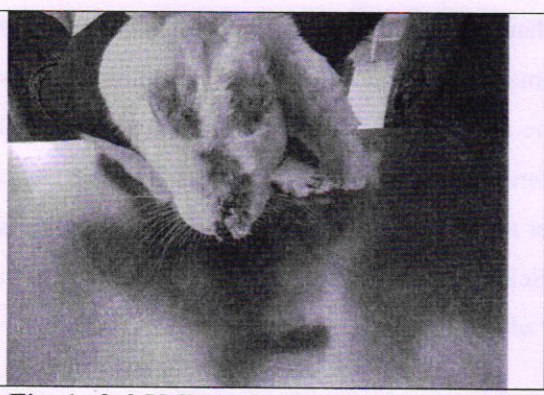

Fig. 1. & 2 Yellowish papulocrustous lesions noticed on the eyes, ears and nose and eyes

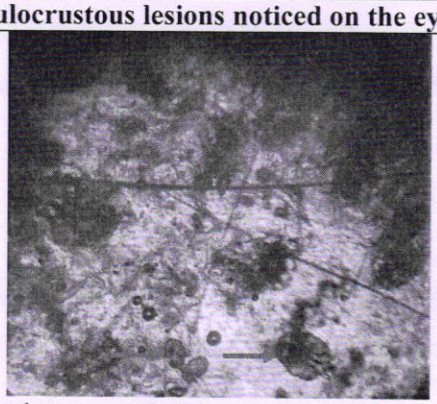

Fig. 3 Microscopy: Skin scrapings revealed *Sarcoptes scabiei* mites with eggs (10 x)