Case Report

SUCCESSFUL MANAGEMENT OF FELINE SCABIES AND ITS ZOONOTIC IMPORTANCE – A CASE REPORT

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A nine months male cat was presented with the history of itching and scratching over the face, ears and forelimb since a month. On physical examination alopecia, scales, crusty, thick, wrinkled and leathery lesions were found on the face and ears. All the vitals were within the normal range. Microscopic examination of the skin scrapping revealed Notoedres cati. Further history also revealed the presence of pruritus and cutaneous lesions on the shoulder and arm region of the owner. The cat was treated with Inj. Ivermectin @200 µg/kg along with topical application of sulphur (10%).

Key Words: Cat – Scabies – *Notoederic* mange - Zoonoses

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INTRODUCTION

Notoederic mange, commonly called as feline scabies is a rare, but highly contagious disease of cats and kittens caused by *Notoedres cati*, which can infest other animals including humans (Ozukum *et al.,* 2019). Notoedrosis is clinically characterized by alopecia, pruritus and crusty lesions on the head, neck, ears, around the eye and feet (Yadav *et al.,* 2022). Zoonotic occurrence of *Notoedres cati* causing feline scabies is well documented in India (Galdhar *et al.,* 2020). However, zoonotic importance of feline scabies is recorded rarely in Tamil Nadu. This report presents the clinical signs, diagnosis and successful management with the associate zoonotic implication.

CASE HISTORY, TREATMENT AND DISCUSSION

A nine months male domestic cat was brought to the Veterinary Clinical Complex, Veterinary College and Research Institute, Udumalpet with the history of itching and scratching over the face, ears and forearm since a month. Physical examination revealed

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Fig 1. Crusty lesion on ear margins of the cat

Fig 1a. Crusting and alopecia on head and neck region

alopecia, scales, crusty, thick, wrinkled and leathery lesions on the face and ears (Fig.1 and 1a). All the vitals were within the normal range. Deep skin scrapping was taken from the lesion and examined under the microscope. Skin scrapping examination revealed the presence numerous *Notoederic cati* (>20) in a single field (Fig.2). It was confirmed as Notoedric mange.

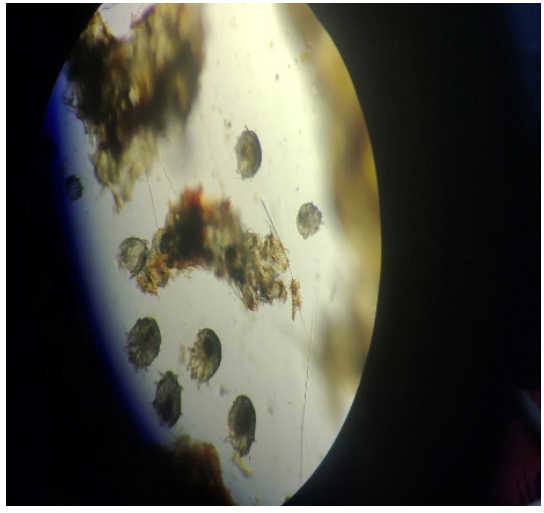

Fig 2. *Notoedres cati* under microscope (10xcat

Fig 3. Skin lesion of cat owner on arm region

The cat owner also was also showing the pruritus and cutaneous lesions like multiple erythematous papules on shoulder and arm (Fig.3).

Based on clinical signs and skin scrapping examination confirmatory diagnosis of Notoederic mange was made. The cat was treated with Ivermectin @ 200 µg/kg, subcutaneously, once a week for four weeks and Selamectin @ 4 mg/kg, as a "spot on" for two times (Priyanka *et al.,* 2016) along with topical application of sulphur (10%) for four weeks (Sivakumar *et al.,* 2017). Significant improvement was noticed after three weeks of treatment. Antibiotic (Cephalexin @ 30 mg/kg BW, BID Orally) and antihistaminic (Hydroxyzine 2 mg/kg BW BID Orally) were given to control secondary bacterial infection and pruritus (Shafi *et al.,* 2020). To correct the alopecia, multivitamins syrup (Vitabest Derm) was administered orally @ 0.5ml/ kg BW, BID (Ozukum *et al.,* 2019). Similar clinical observations like crusty, alopecic lesions on the face and ears and thick, leathery and wrinkled skin was reported by Priyanka *et al.* (2016). Domestic cats are more prone to *Notoederic* infestation (Sivajothi *et al.,* 2015). The standard diagnostic method to confirm the feline scabies was skin scrapping (Iqomah *et al.,* 2020). Treatment regimen to manage the feline scabies was followed from the previous studies (Shafi *et al.,* 2020 and Senthil Kumar *et al.,* 2008) and they used ivermectin as primary drug of choice for feline scabies along with antihistamine and antibiotic. Galdhar *et al.* (2020) reported the zoonotic importance of feline scabies as we observed in this case.

CONCLUSION

The present study reported the clinical and zoonotic importance of *Notoedres cati*. Diagnosis of Notoedric mange could be done based on clinical signs and microscopic studies of skin scrapings. Four doses of ivermectin at 200 µg/kg body weight, S/C at weekly interval along with proper supportive therapy successfully cured the infection in cats.

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