

FELINE SCABIES (NOTOEDRIC MANGE) IN A CAT: A CASE REPORT

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ABSTRACT

A clinical case of feline scabies was recorded in an eleven month old male cat. With thick yellow crusty erythematous lesions and alopecia on the head and ears, the skin scrapings revealed positive for *Notoedres cati* mite. Treatment with two doses of Ivermectin at the rate of 0.2 mg/kg body weight given by subcutaneous route biweekly for a month along with supportive therapy resulted in major improvement in the condition.

Keywords: Crusty erythematous lesions, Ivermectin, *Notoedres cati*

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Feline scabies also cited as Notoedric mange is a rare cutaneous ectoparasite disease of animals caused by a minute mite *Notoedres cati*, that is host-specific generally affecting cats but also occur occasionally as opportunistic infestation in other mammals like rabbits, foxes, dogs including humans (Griffin *et al.*, 1993). It is a highly contagious disease spread by direct contact and can affect any breed, age, and sex of a cat. The condition is characterized by severe pruritus and crusting lesions on the ears, neck, back,

feet and can extend to the entire body if the condition was ignored (Kwochka, 1987; Griffin *et al.*, 1993; Scott *et al.*, 2001). This parasite belongs to the Sarcoptidae family, resembles *Sarcoptes* mite in morphology, lifecycle, infestation, and patho physiology in cats. So, it is very important to differentiate these two mites for correct diagnosis.

Skin scrapings from infested cats are the best clinical material to identify the mite under the microscopy. *Notoedres* mites are smaller than *Sarcoptes* with 'thumb print' like dorsal striations, short limb stalks, and a dorsal anus compared with the terminal anus, dorsal pegs, and spines are seen in *Sarcoptes* species (Kwochka, 1987). Notoedric mange in cats has to be immediately diagnosed and treated properly because of its zoonotic importance (Chakrabarti, 1986; Foil, 2003; Sivajothi *et*

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Fig. 1: Thick yellow crusty lesions on the head and ear margins

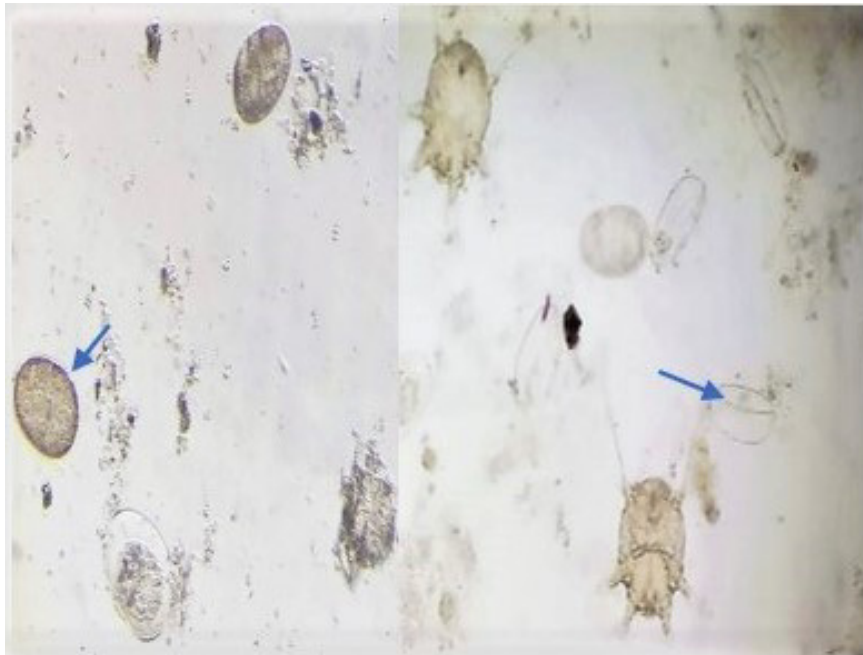


Fig. 2: Ova of *Notoedrus cati* mite

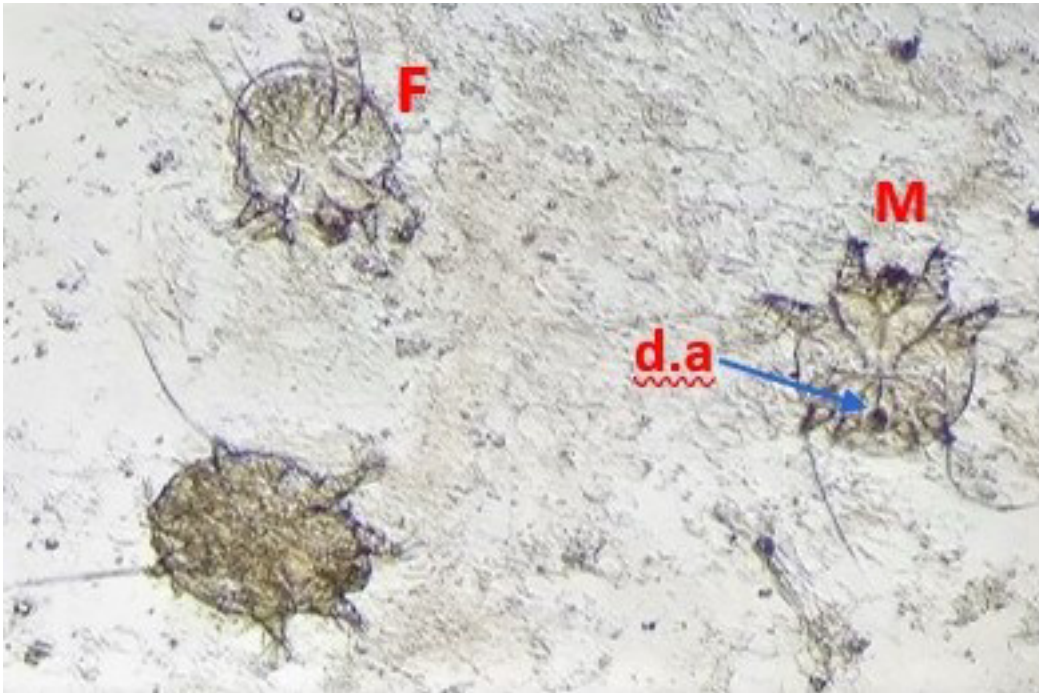


Fig. 3: Adult *Notoedrus cati* mite (M-Male, F- Female & d.a- dorsal anus.)

al., 2015; Galdhar *et al.*, 2020) This paper records a case of Notoedric mange in a cat and its successful treatment.

An 11 month old male cat was presented to the Teaching Veterinary Clinical Complex, Rajendranagar with the history of reduced feed intake, severe pruritus, and alopecia for more than 20 days as mentioned by the owner. Upon clinical examination all physiological parameters were normal. The physical examination revealed that the cat was slightly emaciated with thick yellow crusty lesions, with alopecia on the head and ears. There were crusty erythematous and excoriated skin lesions on the head and ears, especially on the margins of the ears (Fig.1)

resulting from self-mutilated injury due to intense pruritus. Skin scrapings were collected from affected areas, processed in 10 % KOH, and observed under the microscope (10x, 20x) for mange mite diagnosis.

Based on the history, clinical findings of characteristic itching and hair loss pattern and microscopic observations of the mange mite, it was confirmed that the cat was infested with *Notoedrus cati* (Soulsby, 1968; Griffin *et al.*, 1993; Walker, 1994). The skin scrapings also revealed ova to adult stages of the mite (Fig.2). The *Notoedrus cati* mite was much rounder and smaller than *Sarcoptes* with the dorsal anus (Fig.3).

As this disease is highly contagious

and communicable to man, immediate effective treatment is needed. The general line of treatment includes the use of Selamectin @ 4 mg/kg as a “spot-on” or Ivermectin @ 200 µg/kg subcutaneously at weekly intervals or fortnightly for a month (Scott *et al.*, 2001), Kumar *et al.* (2008) treated a case of feline scabies successfully using Ivermectin. In this present case, the cat was administered with Ivermectin @ 200 µg/kg subcutaneously and a second dose was given after 2 weeks along with supportive therapy. No adverse reactions were seen after drug administration. After a week there was a slight improvement in clinical signs and after 2 weeks of second dose the skin scrapings were negative for mites. If any delay in therapy it may spread to the face, neck and, entire body.

The present study showed that ivermectin was effective in the treatment of Notoedric mange in cat. The infested cats have to be segregated from others until the condition is completely cured.

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