# Feline scabies and its zoonotic occurrence: a case report

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Feline scabies is highly contagious parasitic skin disease caused by the obligate parasite *Notoedres cati*. This parasite is a member of the Sarcoptiform family and reported as an opportunistic infestation of other animals including human (Griffin *et al.*, 1993). In cats disease is characterized by cutaneous lesions on the ears, face or neck and extreme pruritus( Kumar *et al.*, 2008). Zoonotic occurrence of *Notoedres cati* caused feline scabies is well documented in India (Chakrabarti, 1986 and Sivajothi *et al.*, 2015); however none of the scientific report was available about feline scabies and its zoonosis from Mumbai area. Present clinical case record reports feline scabies and its zoonotic occurrence from Mumbai area.

## Case history and observation

A female domestic cat (4 months old) was referred to Department of Veterinary Clinical Medicine, Mumbai Veterinary College, with history of partial loss of appetite, chronic hair loss, intense pruritus and scabby lesions at all over the body. Clinical examination of the cat revealed moderate increase in body temperature (102°F) with noticeable emaciation. Presence of thick crusty scabs were recorded on whole body, but its severity was more at the tips of the ears (Fig. 1). Superficial and deep skin scrapings as well as tape impression smears were collected from various sites of the cat. During collection of the skin scrapping, sloughing of the skin was noted. The skin scraping examination of the crusty skin revealed all stages of Notoedres cati mite from ova (Fig. 2) to adult mite (Fig. 3). During anamnesis and thorough discussion with the cat owners, it was recorded that the cat was indoor and maintained in house and nearby area. Owner also communicated that they were also suffering with intense pruritus since last one week. The lesions recorded were small erythematic crusted papules, hyper pigmentation on legs. This sequential incidence of events suggests that this is an occurrence of feline mange and its zoonotic transmission to human beings. Considering this fact, owners were advised to seek guidance from registered medical practitioner, who suspected the same after inspecting the typical lesions available on legs (Fig. 4).

#### **Discussion**

In the present clinical case record, occurrence of Notoedres cati mange and its zoonotic transmission to human beings is reported. The clinical case was diagnosed as feline scabies (Notoedres cati) on the basis of clinical findings and skin scrapping examination. Furthermore, human scabies was suspected on the basis of typical (small erythematic crusted papules, hyper pigmentation) lesions on legs. Mullen and Durden (2002) reported that humans occasionally become infested with Notoedres cati mange following prolong exposure to infested cat. People may become sensitized to this mite and develop intense pruritus within few hours of subsequent contact with them. They also opinioned that pruritus reaction is induced without the mite's actually burrowing and most common site of skin lesion are on the hands and legs, reflecting the area are most likely to come into contact with pets.

This illustration may be of great help not only for practicing veterinarians but also for medical practitioner to guide pet owners about zoonotic importance of feline scabies.

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Fig. 1: Thick crusty scab at the tips of the ears



Fig. 2: Notoedres catiova

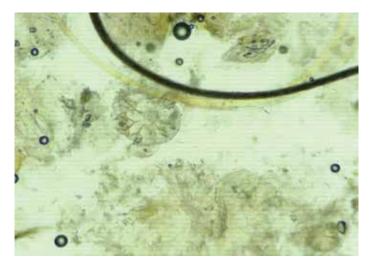


Fig. 3: Notoedres cati adult



Fig. 4: Erythematic crusted papules and hyper pigmentation lesions on legs

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