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Notoedric mange in a cat: A case report

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Abstract

A four months old female Persian cat with a history of Pruritis, generalized alopecia, Inappetance, ocular discharge, apathy and scab-like lesions was reported to the T.V.C.C., Veterinary College, Jabalpur for treatment. Skin scrapings from the affected parts revealed heavy infestation by the mite *Notoedres cati* as evidenced by the presence of a dorsal anal slit. The affected parts were complicated by fungi and pyogenic bacteria. The animal was treated with Ivermectin at the dose rate of 400 µg/kg B.W. subcutaneously at weekly intervals for 5 weeks along with Cetirizine at the dose rate of 2.5 ml orally once a day for 2 weeks and an omega-3-fatty acid supplement with topical application of Betadine for one month. There was significant improvement in the body condition of the animal and post-treatment skin scrapings were free from the mite.

Keywords: persian cat, *Notoedres cati*, ivermectin, skin scrapings

Introduction

Notoedric mange is a rare, extremely contagious zoonotic condition in cats caused by *Notoedres cati* mite. This mite can be differentiated from the similar looking *Sarcoptes spp* on the basis of the location of the anal slit which is dorsal in *Notoedres cati* while it is terminal in *Sarcoptes spp*^[1]. This condition is characterized by severe itching and a crusty appearance of the skin particularly at the head, ears and neck or even, on the whole body in young cats^[2]. Cats suffering from this condition will scratch their skin incessantly and may cause sores. Diagnosis can be done with the help of skin scrapings. Traditionally Notoedric mange has been treated with Ivermectin^[3].

History and Clinical signs

A four months old female Persian cat with a history of Pruritis, generalized alopecia, Inappetance, ocular discharge, apathy and scab-like lesions was reported to the T.V.C.C., Veterinary College, Jabalpur for treatment. The skin showed patches of hairless areas with wrinkled appearance. The conjunctiva appeared congested with associated Mucoid discharge along with mild Blepharitis. The animal was lethargic and reluctant to move.

Diagnosis

A tentative diagnosis of mange was made on the basis of clinical signs. A confirmation was made with the help of skin scraping examination^[4]. Scrapings were taken from the periphery of the lesions from different body parts with the help of scalpel in 10% KOH until capillary blood oozed out. The mixture was boiled until a homogenous suspension was achieved. It was cooled and centrifuged at 2000 r.p.m. for 5 minutes. The supernatant was discarded and the sediment was observed microscopically. The sediment revealed typical *Notoedres cati* eggs, larvae and adults in heavy numbers. Fungal hyphae were also observed (Fig 1).



Fig 1: Scrapping containing *Notoedres cati*

Treatment

The cat was treated with Ivermectin at the dose rate of 400 $\mu\text{g}/\text{kg}$ B.W. subcutaneously at weekly intervals for 5 weeks [5]. Along with ivermectin injection, cetirizine at the dose rate of 2.5 ml orally once a day for 2 weeks and an omega-3-fatty acid oral supplement with topical application of Beta dine for one month was also given. No adverse reaction was observed after therapy with Ivermectin [6]. There was significant improvement in the body condition of the animal and post-treatment skin scrapings were free from the mite.



Fig 2: Before treatment

Fig 3: After treatment

Discussion

It was suggested that the characteristic itching and hair loss pattern was often all that was needed to diagnose Notoedric mange in the cat [2, 7]. The mites can be identified on the basis of their shape and the location of anal slit [1]. Ivermectin was used for treatment of cats suffering from Notoedric mange and obtained significant improvement in the body condition of the animals without any adverse consequences [6]. It can be used at a dose of 200 $\mu\text{g}/\text{kg}$ body weight subcutaneously for treatment of Notoedric mange in cats [3]. However, Ivermectin can also be used at extralabel doses to treat ectoparasites [5]. Hence a dose of 400 $\mu\text{g}/\text{kg}$ body weight can be safely used in cats.

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