

THERAPEUTIC MANAGEMENT OF NOTOEDROSIS IN A CAT: A CASE REPORT

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SUMMARY

Ten months old male cat was reported to Veterinary Clinical Complex, Lakhimpur College of Veterinary Science, with history of intense pruritus, crusty lesion and alopecia around the eye and ear. On physical examination, a leathery area over the ear and alopecia around the eye were recorded. Examination of skin scrapping revealed the presence of adult mite of *Notoedres cati*, confirming the case to be of notoedrosis. Treatment was initiated with ivermectin @ 0.2 mg per kg body weight subcutaneously once a week for two occasions to which the animal responded well and recovered completely.

Keywords: Cat, Ivermectin, *Notedres cati*, Notoedrosis

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Notoedric feline mange is a highly contagious dermatological disease caused by the obligate sarcoptic mite, *Notoedres cati* in felids which can also infest other animals and humans (Foley *et al.*, 2016). Notoedrosis is clinically characterized by alopecia, pruritus and crusty lesions on the head, neck, ears, around the eye and feet (Priyanka *et al.*, 2016). A confirmatory diagnosis of this condition should be made with skin scrapping. Treatment and management of notoedric mange remain difficult and complex due to its infectious existence and zoonotic significance. Therapeutic regimes usually include ivermectin at the dose rate of 0.2 mg/kg body weight subcutaneously or Selamectin at the dose rate of 4 mg per kg body weight as spot-on at weekly or fortnightly intervals for one month (Senthil Kumar *et al.*, 2008). The present communication describes a case of notoedrosis in a cat and its successful management with ivermectin.

Ten-months-old male indoor reared cat weighing 1.2 kg was presented to the Veterinary Clinical Complex, Lakhimpur College of Veterinary Science, with a history of intense pruritis, alopecia and scaly lesions over the ear and around the eye for one and half month (Fig. 1-2). Clinical examination revealed crusty lesions and alopecia over the face and ear. The affected areas over the ear were thick, leathery. All other physiological parameters were within the normal range.

Usually, diagnosis of notoedric mange in the cat can be made based on the characteristic pruritus and hair loss patterns (Foil, 2003). In the present case, skin scrapping from the affected area after clearing with 10% KOH was examined under 40 X microscope (Fig. 3) (Soulsby, 1968). Examination of the scrapping revealed the adult stage of

Notedres cati mite and confirmed the diagnosis in the present case. The mites were identified as per the suggestion of Walker (1994), based on the dorsum presence of the anus, smaller and more circular, differentiating the *Notoedres cati* from *Sarcoptes*.

Notoedres cati has zoonotic implications, so immediate management is necessary to prevent transmission from affected animal to the owner (Foil 2003; Senthil Kumar *et al.*, 2008). In the current study, immediate treatment with ivermectin (Neomec® injection, Intas Pharamceuticals, India) @ 0.2 mg/kg body weight subcutaneously for two occasions on seven days intervals was advised. Further skin tonic Velcote® syrup (Vit. A, D3 and E) (Bayer India) @ 2.5 ml twice daily orally for one month was also advised. No adverse effect was recorded during and after the treatment. Significant reduction in the crusty lesion and alopecia was recorded on the 30th day of post-treatment (Fig. 4). Skin scrapping was also negative for *Notedres cati* mites on the 30th day of post-treatment. The successful reduction in the clinical findings in the present study suggests ivermectin as a therapeutic option for notoedrosis in cats. Ivermectin is an endo and ectoparasiticide (Yadav *et al.*, 2021). Senthil Kumar *et al.* (2008), Priyanka *et al.* (2016), Stevanovic *et al.* (2019) and Fular *et al.* (2019) also suggested similar efficacy of ivermectin for the management of feline notoedrosis. In a similar line, Narang *et al.* (2019) reported the similar efficacy of Ivermectin for notedric mange management in rabbits. Ivermectin @ 0.2 mg per kg body weight subcutaneously once a week for two occasions, is safe and effective for the management of notoedrosis in cat.

REFERENCES

Foil, C.S. (2003). BSAVA Manual of Small Animal Dermatology. Foster,

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Fig. 1. Crusty lesions (Arrow Pointed)



Fig. 2. Alopecia (Arrow Pointed)

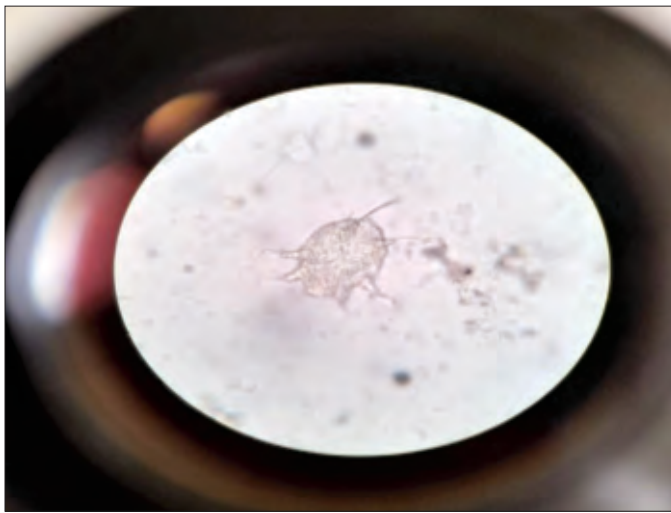


Fig. 3. *Notoedres cati* mite (40 X)



Fig. 4. After recovery

- A.P. and Foil, C.S. (Edts.) (2nd Edn.), BSAVA, Gloucester, UK, pp. 203-214.
- Foley, J., Serieys, L.E.K., Stephenson, N., Riley, S., Foley, C., Jennings, M., Wengert, M., Vickers, W., Boydston, E., Lyren, L., Moriarty, J. and Clifford, D.L. (2016). A synthetic review of notoedres species mites and mange. *Parasitology*, **143**: 1847-1861.
- Fular, A., Geeta., Shakya, M., Singh, M., Upadhaya, D. and Kumar, S. (2019). Therapeutic management of mange infestation in cat (*Felis catus*): a case report. *Int. J. Trop. Ins. Sci.* **39**(4): 291-194.
- Narang, S., Ranhawa, C.S., Sidhu, S. and Kaur, P. (2019). Notoedric mange in two rabbits—case report. *Haryana Vet.* **59**(SI): 136-138.
- Priyanka., Sudhakar, N.R., Rakesh, R.L. and Showkat, U.N. (2016). Notoedric mange in a cat: A case report. *Indian J. Vet. Med.* **37**(1): 72.
- Senthil Kumar, K., Selvaraj, P., Vairamuthu, S., Srinivasan, S.R. and Kathiresan, D. (2008). Ivermectin therapy in the management of Notoedric mange in cats. *Tamilnadu J. Vet. Anim. Sci.* **4**(6): 240-241.
- Soulsby, E.J.L. (1968). Mites. In *Helminths Arthropods and Protozoa of Domesticated Animals*, Braillire, Tindall and Cassell, London, p.: 743.
- Stevanovic, O., Vujanic, D., Dobrijevic, M., Nedic, D. and Trbojevic, I. (2019). Notoedrosis in a household cat—case report. *Arh. Vet. Med.* **12**(2): 39-47.
- Walker, A. (1994). *The Arthropods of human and domestic animals*. Chapman and Hall, London. pp. 7-8.
- Yadav, S.N., Nath, A.J., Ahmed, N., Baishya, M.P. and Saikia, K. (2021). Efficacy of different therapeutic regimes on wound myiasis in cattle—A clinical study. *Haryana Vet.* **60**(SI): 120-122.