

## Lynxacarus radovskyi infestation in a Persian cat: A case report

B.G.Rohini<sup>1\*</sup>, V.H. Shyma<sup>2</sup> and U. N. Pillai<sup>3</sup>

<sup>1</sup>MVSc Scholar, Department of Veterinary Clinical Medicine, Ethics and Jurisprudence, <sup>2</sup>Assistant Professor, Department of Veterinary Epidemiology and Preventive Medicine, <sup>3</sup>Professor and Head, Department of Veterinary Clinical Medicine, Ethics and Jurisprudence, College of Veterinary and Animal Sciences, Mannuthy, Thrissur, Kerala- 680651.

### Abstract

A white female Persian cat of 6 month age with the complaint of dry coat, hair loss and skin lesions on the face was brought to the medicine unit of Teaching Veterinary Clinical Complex, Mannuthy. Physical examination revealed a 'salt and peppered' appearance on coat suggesting appearance of mites. Microscopic examination of plucked hair showed the presence of *Lynxacarus radovskyi* mites adhering to the hair along the shaft. The cat was treated with a single dose of selamectin 6% spot-on applied topically on the dorsal aspect of neck above shoulder blades. The cat had an uneventful recovery two weeks post treatment. Selamectin was found safe and effective in eradication of fur mites in cats.

**Keywords:** Cat, *Lynxacarus radovskyi*, Selamectin, Spot-on

### Introduction

*Lynxacarus radovskyi* (Acarina: Astigmata: Listrophoridae) is widely distributed parasite of cat (Jeffery *et al.*, 2012). It was first reported in 1974 from cats in Hawaii (Tenorio, 1974). Jayanthi *et al.* (2017) reported *L. radovskyi* for the first time in India in a Persian cat in Chennai. Clinging of Mites and eggs on the hair gives a "salt and peppered" appearance, causing them to look dull, dry, dishevelled and easily epilated.

### Case History and Observations

A 6 month old female Persian cat weighing 6 kg was brought to the Medicine unit of Teaching Veterinary Clinical Complex, Mannuthy with the complaint of dull coat, hair loss and skin lesions in face since one week.

On clinical examination animal was found weak with lusterless hair coat, matting of hairs, alopecia around eyes and on ears (Fig.1) along with a "salt and peppered" appearance on hair coat (Fig.2). Microscopic examination of plucked hairs revealed presence of *Lynxacarus radovskyi* mite clinging to the hair shaft (Fig.3).

Single dose of selamectin spot-on (6%) was applied topically on the dorsal aspect of neck above shoulder blades at the dose of 6 mg/kg body weight. The animal was found to be negative for *L.radovskyi* infestation along with absence of "salt and peppered" appearance on hair coat two weeks post treatment. Follow-ups were done at one or two month intervals.

### Discussion

Lynxacarosis is an important differential diagnosis for clinicians when cases are presented with a caudally directed self-induced alopecia in geographical regions where these mites have been documented in cats. Clinical signs of hypersensitivity and pruritis have been reported in infected cats (Han, 2015). Fipronil eliminated mites from 100 percent of naturally infected cats (Clare *et al.*, 2004). A single dose of oral fluralaner or two moxidectin/imidacloprid spot-on treatments two weeks apart are efficacious for eradication of *L. radovskyi* in cats (Han *et al.*, 2016). Subcutaneous injection of Ivermectin (@ 300µg/kg) was reported to be very effective without any recurrence up to five weeks (Jayanthi *et al.*, 2017). *L.radovskyi* may also affect human beings handling infested cats inducing dermatitis in the form of papular rash (Foley, 1991). However, these were not observed in the present reported case.

### Conclusion

The present case reports the natural infestation of cats with fur mite *Lynxacarus radovskyi* and its successful treatment with selamectin spot-on formulation.

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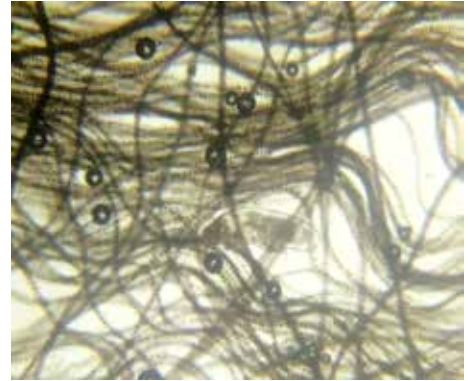
\*Corresponding author: Rohiniganagadhar27@gmail.com



**Fig. 1** Alopecia on eyes and ears



**Fig. 2** Salt and peppered appearance on hair coat of infected cat



**Fig. 3** Adult *Lynxacarus radovskyi* mite clinging to the hair shaft.

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