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Therapeutic efficacy of topical selamectin in feline otoacariosis

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Abstract

Otodectes cynotis (ear mite) is a psoroptid mite that accounts for 50-80% of otitis externa cases in cats. A 9 year old female cat was presented with history of intense aural irritation, scratching at the ears and presence of brown waxy exudates from the external ear canal. Diagnosis is made with microscopic examination of ear wax, revealing the presence of the *Otodectes cynotis*. The cat was treated with selamectin spot-on preparation at 6mg/kg body weight, as single dose applied topically in a single spot at the base of the neck region in front of the scapulae. A single administration of a spot-on formulation of selamectin at the minimum dose was found to be efficient in the treatment of ear mite infestations in the present case.

Keywords: cat, otitis externa, *Otodectes cynotis*, selamectin

Introduction

Otoacariosis or otodectic mange is diagnosed in up to 66% of the otitis externa cases reported in cats (Becksei *et al.*, 2017) ^[1] *Otodectes cynotis* is a relatively large mite (0.3-0.4mm) that lives mostly in the ear canal of the dog and cat and also it can be found occasionally on other areas of the body, especially around the tail base on cats where they sleep curled up. It is a non-burrowing mite and it lives by browsing on surface skin debris and tissue fluid. *Otodectes* infection leads to the production of copious amount of dry, dark brown, crumbly waxy debris resembling coffee grounds (Paterson, 2012) ^[2]. Diagnosis of *O.cynotis* infestation is confirmed by visualization of live mites with otoscopic examination or by microscopic examination of swab samples from the ear canals (Yang and Huang, 2016) ^[3].

Case history and observations



Fig 1: Alopecia around the base of the ears, forehead and ear pinna



Fig 2: Dry dark brown waxy debris in the external ear canal

A 9 year old female cat was presented with history of brown waxy exudates from the external ear canal, intense aural irritation and scratching at the ears since one month. Clinical examination revealed alopecia around the base of the ears, forehead and ear pinna (Fig.1), presence of dry dark brown waxy debris in the external ear canal (Fig.2).

Diagnosis, Treatment and Discussion

Microscopic examination of ear swab revealed *Otodectes cynotis* (Fig.3). Single dose of selamectin spot-on was applied topically at the base of the neck in front of the scapulae at a dosage of 6mg/kg (Blot *et al.*, 2003) [4]. The animal found to be negative for *Otodectes cynotis* infestation one month after selamectin application (Fig.4).

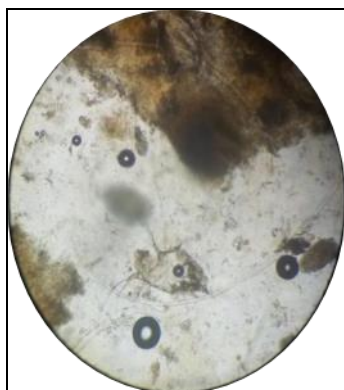


Fig 3: *Otodectes cynotis* on microscopic examination of ear



Fig 4: Recovery after 1 month

macrocyclic lactone is active against otodectic mange in cats, fleas in dogs and cats, sarcoptic mange in dogs, biting lice in dogs and cats, heartworms in dogs and cats, intestinal ascarids in dogs and cats and hookworms in cats. A single topical administration of selamectin at the minimum recommended dose is found to be effective against naturally acquired aural infestations of *O. cynotis* mites in cats (Blot *et al.*, 2003) [4].

Conclusion

Single topical application of selamectin spot-on when provided at the minimum recommended dosage of 6mg/kg was found to be effective against *O. cynotis* mites in cats when assessed 30 days after administration with a disappearance of mites and clinical signs. It was found safe and convenient to apply.

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References

1. Becskei C, Reinemeyer C, King VL, Lin D, Myers MR, Vatta AF. Efficacy of a new spot-on formulation of selamectin plus sarolaner in the treatment of *Otodectes cynotis* in cats. *Veterinary parasitology* 2017;238:S27-S30.
2. Paterson S, Tobias K. Atlas of ear diseases of the dog and cat. John Wiley & Sons 2012,184.
3. Yang C, Huang HP. Evidence-based veterinary dermatology: a review of published studies of treatments for *Otodectes cynotis* (ear mite) infestation in cats. *Veterinary dermatology* 2016;27(4):221-e56.
4. Blot C, Kodjo A, Reynaud MC, Bourdoiseau G. Efficacy of selamectin administered topically in the treatment of feline otoacariosis. *Veterinary parasitology* 2003;112(3):241-247.

The case study deals with the treatment of otoacariosis with spot-on formulation of selamectin. Otoacariosis or aural infestation of *Otodectes cyanotis* is a relatively common disease found in cats. Selamectin, which is a new acaricide