OTODECTOSIS OF STREET AND DOMESTIC CATS – DIAGNOSIS, TREATMENT AND PREVENTION

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Introduction. Ear mites are common in pets and can cause a great deal of discomfort and it can be a serious problem. The ear mite, *Otodectes cynotis*, worldwide distributed which commonly infects dogs and cats and belong to the non-burrowing mites' group. It occurs in a number of other mammals including the ferret, red fox and other carnivores [3, 6, 7, 8]. *Otodectes cynotis* mites are transmitted through direct contact with infested ferrets, dogs, or cats or indirect contact with care items or staff. The entire life cycle is completed in 3 weeks and they are typical binymphal mites which development cycle consist of stages as egg, larvae, protonymph, teleonymph and adults male and female [2, 9].

There are many effective preparations for Otodectes mites available as ear drops and spot on [4, 5].

Aim of the work - to compare the diagnosis and treatment of domestic and street cats suffering for Otodectosis in Pet's Land clinic, Israel and to provide recommendations of prevention measures.

Methods. Veterinary assistance is fundamental to establish a correct diagnosis and therapeutic plan. The study of cats' Otodectosis was conducted during first six months of 2023. Both domestic and street cats were as materials in our research as well as ear wax collected from the sick cats and examined by acaroscopic compressor method and by otoscope [1]. It's included swabbing sample, microscopic slide, mineral oil, microscope, otoscope, anthelmintics drugs "Ivermectin" and Bravecto.

Results. During the internship which started from 16.1.2023 till 23.06.2023 our clinic received different cases with otodectoses for examination, methods of diagnosis and treatment included different types of methods and materials that helped us in making the diagnosis and performing the correct treatment. It was easier to diagnose domestic cats due to the presence of the necessary information that was provided by the owner.

Our comparison includes examining the cats' ears with an otoscope or through a microscopic examination of ear discharge which is considered a simple method of diagnosis, the results of examining 15 domestic and street cats shows that the microscopic examination is more accurate than the otoscopic examination. The result of the Otoscopic examination was positive for 12 cats, while it was negative for 3 cats, that's why we had to perform microscopic examination of ear discharge. We examined the three cats to confirm the diagnosis by microscopic examination, and the results were positive for all cases.

We concluded from the research that the ear canal should first be thoroughly cleaned, and after the ear drops have been instilled, the base of the ear massaged to disperse the oily preparation. Whatever preparation is used, treatment should be repeated in 10-14 days to kill any newly hatched mites.

In our research the treatment included drugs which is ivermectin and Bravecto. Ivermectin performed by drops in the ear canal twice with 10-day interval. Bravecto used a single dose by applied to the skin on the back of the neck once per three months and to keep routine use of Bravecto its' mitigate infestation. Bravecto was an effective drug for treating such a parasite because of its prolong acting. Advise owners to ensure that everything that has been in contact with a pet with mites has been thoroughly cleaned.

Ear mites are common in pets and can cause a great deal of discomfort. Veterinary assistance is fundamental to establish a correct diagnosis and therapeutic plan. And we provide recommendation for owners:

 \succ to clean the ears,

> to examine the animal regularly for ear mites by laboratory methods,

 \blacktriangleright not to contact with the sick animals,

 \succ apply the ear drops or other preparation with prolonged acting for prevention purpose.

Conclusions:

1. Although common in pets, ear mites can be a serious problem. Scratching of the ear and head shaking are some of the clinical signs of ear mites. Transmission of ear mites can occur by direct contact between animals and also via fomites.

2. When a pet is diagnosed with ear mites, it is necessary to treat the environment and all in-contact animals.

3. Otoscopic examination is an effective method to diagnose *Otodectes cynotis* but we recommend using microscopic examination of ear discharge whenever the examination result is negative. Routine use of anthelmintics drugs and Bravecto, its mitigate infestation of Otodectosis.

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