

## Ear Mites

Ear mites in dogs are common especially in young animals. Sometimes the dog may show no signs of discomfort associated with these parasites but in other cases they will lead to otitis which is a painful inflammation of the ear.

Otodectes cyanotis is the mite found in the ears of dogs and cats. These mites generally live along the surface of the ear canal but can occasionally be found on other parts of the body and in the general environment. The most common positions for them to be found other than the ear are the neck, rump and tail. Thick reddish brown crusts and scales will be seen in the ear when these mites are present.

Some dogs may have ear mites and show no signs of discomfort. However other animals will become hypersensitive to them. They develop an allergic reaction to the mites which results in an intense itching and discomfort. Because the ears become so itchy the dog may scratch itself badly on the outer surface of the ear. Due to the irritation the dog may hold its ear down flat against its head and vigorous shaking of the head is common. If the ear is rubbed the dog will often make scratching motions with its hind-legs.

It is usually quite obvious to your vet if ear mites are likely to be the cause of your pet's ear problem because they can just about be seen with the naked eye (using an otoscope) as off white, moving specks. If necessary ear swabs may be taken and the mites observed under a microscope. If your dog is infected with ear mites there will probably be thousands of them along the surface of the ear canal. They stay on the surface of the skin and do not burrow into the skin as other mites may do. They are spread extremely easily from one pet to another by direct contact so if one animal is found to have ear mites then all the animals in the household should be treated for them.

When treating animals for parasites it is useful to understand the life-cycle of the parasite you are trying to eradicate. The life-cycle of the ear mite takes about 21 days to complete. There are four different stages in the life-cycle of the ear mite. The first stage is obviously the egg which will be laid on the surface of the ear canal and takes about 4 days to hatch. The larvae from the eggs feed for about 4 days then rest for a day before molting to form the nymphal stage. The nymphs feed for around 4 days then molt and

feed again for approximately another 4 days before molting again and becoming adults. Adult ear mites feed off the epithelial debris (skin flakes) and secretions in the ear canal and lay their eggs to begin the next generation.

Treatment of ear mites should commence by cleaning the ears to remove excess debris and discharge. A preparatory ear cleaner may be used for this. The ears should then be treated with a topical preparation such as Canaural to kill the mites. This treatment should be continued for 2 weeks after the dog seems to be cured to ensure that all ear mites are killed as they progress through their life-cycle. The dog should also be treated with a good quality flea product as this will help to kill any ear mites on other parts of the body. The animal's environment and bedding should be treated for parasites. Again the flea products on the market may be used. All the animal's bedding should be washed and treated or renewed. This environmental treatment should be repeated after about 3 weeks to catch the next generation of ear mites completing the life-cycle.

If the problem in the ears has become severe or has been going on untreated for some time there may be secondary infection with bacteria or yeasts which will also need to be treated if the animal is to be cured. If otitis (the inflammation of the ear) becomes very severe there may be further complications such as a ruptured ear drum and middle ear disease which causes the dog to tilt its head and become very unbalanced. This needs very prompt attention and treatment.

Surprisingly these *Otodectes* mites can bite humans, but this is rare and I have never come across it in practice.