

Heartworm Disease in Cats

By: Kari Lyon, VMD

Despite what most people think, heartworm disease is not only a disease of our canine friends, it affects our feline friends as well, albeit much less commonly. Heartworm disease in cats has increased in incidence and awareness over the past few years. Heartworm disease in cats is a problem anywhere it is a problem in dogs.

Cats are infected with heartworms the same way dogs are, by the bite of an infected mosquito. The parasite responsible for the disease is the same as well, *Dirofilaria Immitis*. However, there are more differences than similarities between canine and feline heartworm disease. Despite the number of larvae injected into the cats blood stream by the mosquito, very few live to be adult worms in cats, whereas approximately 95% grow into adults in dogs. The adult worms generally only live about 2-3 years in cats and can live to be 5 or 6 years old in a dog. Both indoor and outdoor cats are at risk for heartworm infection.

A cat's body reacts differently to the presence of immature and adult heartworms than a dog's body does. In dogs, the problems associated with heartworm infection are usually due to the presence of such large worms within the dog's vessels causing obstruction of blood flow. The cat's disease is due to a severe inflammatory response to the presence of the immature worms. For this reason it is very difficult to diagnose heartworm disease in cats because their body gets rid of the immature worms very quickly. Symptoms of heartworm disease in cats are more associated with lung disease rather than heart disease as it is in dogs. Such symptoms include lethargy, vomiting collapse, seizures, respiratory problems, as well as sudden death.

As previously mentioned, diagnosing heartworm disease can be very difficult. Because the disease is not dependent on adult worms, the test used in dogs (antigen test) is not very helpful. The second test commonly used in dogs looks for the presence of immature worms in the blood. This test too can not be used in cats because cats usually rid the body of immature worms quickly, they usually do not have enough adults to produce offspring or there may be only a few adults of a single sex. In cats, testing for antibodies against *D. Immitis* can be helpful but is not 100% diagnostic. A positive test may indicate an infection with only mature and/or immature worms, or it could indicate a past infection. For this reason the American Heartworm Association recommends combining an antigen and antibody test when screening apparently healthy cats. In cats where signs of heart and/or lung disease are present or heartworm disease is suspected, both these tests should be performed along with chest radiographs and echocardiography.

Treatment of heartworm disease in cats is usually aimed at decreasing the body's inflammatory response to the present worms using steroids. In cat's that are not showing clinical signs of disease, the American Heartworm Society recommends waiting out the worm's 2 to 3 year life span while monitoring chest radiographs every 6 months for signs of worsening disease. Cats that become acutely ill due to heartworm disease need to be stabilized prior to treatment. At this point in time there are no treatments licensed for cats that are effective at killing adult heartworms, and there are no studies to confirm that killing the adult heartworms increases survival rates.

Heartworm disease in cats is 100% preventable as it is dogs. There are monthly preventative products available to cats for the prevention of heartworm disease. Please ask your veterinarian which product would be right for you and your cat.