

## ***Ask the Vet:* Heartworms Cause Lung Disease in Cats**

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As the years pass, some images from my veterinary practice remain crystal clear in my mind. Two of those images share uncanny similarities in that they both involve beloved cats owned by 2 different elderly women who remain very important to me personally. One of those great women has since died, but my memories of her continue to inspire me. The other woman remains vivacious and embraces life to its fullest today. I value highly my opportunities to learn from her. The first of my images involving the cats occurred over 15 years ago; the second occurred about 11 years ago. Both cats presented to our hospital lying, nearly dead on the floor of their owner's cars. Both cats were treated aggressively and survived. Both cats were diagnosed with heartworm disease.

Perhaps, you are aware of the fact that heartworms are transmitted to dogs by the bite of a heartworm infected mosquito. Perhaps, your dog never misses a dose of heartworm preventive medication all year, and the dose you give is accurate for your dog's weight, and you give the medication on exactly the right day in exactly the manner indicated by the product instructions. If so, then I tip my hat to you as will your dog in appreciation for preventing an evil disease. The medications that are currently available are very effective, but only when used on time, correctly, and all year.

Do you also protect your cat from heartworm infection? Stored blood samples have proven that heartworms have been infecting cats since 1935. This disease is not new. I can remember attending a seminar in 1997 that spread the news of heartworm disease in cats to a large group of veterinarians. As a group of both young and old, our collective knowledge and experience with feline heartworm disease was comparatively meager in contrast to what we understood about canine heartworm disease. Even more interesting to me was a seminar I attended several years later when the results of a study of cats that were identified as being infected with heartworms showed the dramatic differences of the disease in cats compared to the disease in dogs.

Although many body sites can be affected, the most common damage identified in heartworm infected dogs occurs in the heart. Early diagnosis with available, reliable blood tests allows treatment to eliminate the heartworm parasite from the dog. Most dogs treated early heal without long-term consequence.

Because cats are so prone to unleashing massive inflammatory responses to irritants, the feline heartworm disease damage occurs in the lungs. Damage to the lungs happens fast, usually long before currently available diagnostic tests can identify the infection. By the time signs of disease are noticed by owners, the cat has severe lung disease. As did the 2 cats that I mentioned. I see them in my images with my assistant giving them oxygen by mask while I administered injectable medication. We urged them to continue breathing, and our adrenaline driven fears and worries were eased as the cats improved. They were the lucky ones. Many cats die seemingly suddenly without identified cause when they have heartworm disease. Some cats offer signs of non-specific cough or vomiting that are vague.

Unlike the situation with dogs, no specific medical therapy exists to treat cats with heartworm disease. The treatment for cats is intended to control the inflammation which can kill and to prevent further infection while the life span of the heartworm of up to 2-3 years is waited out. That period of waiting is not without worry of worm embolism or sudden death or chronic heart disease.

Heartworm preventive medications that are safe and effective exist for both dogs and cats. Correct and continuous use of them prevents 1) heartworm disease, 2) spread of heartworms to others, and 3) the mental suffering that we feel when a beloved pet is lost or a pet owned by a very special person is sick.