

April 2022

Heartworm Disease

April is Heartworm Disease Awareness month. How much do you know about heartworm disease?

The Pesky Mosquito

Heartworm disease begins with the mosquito. The mosquito bites an infected animal and obtains a larval stage of the parasite called microfilaria. Once the microfilaria mature within the mosquito, the mosquito can bite a dog or cat and transfer the microfilaria into the bloodstream. These microfilaria then turn into adult heartworms within about 6-7 months. At this point, the adult heartworms can mate, producing more microfilaria, and the lifecycle repeats.

Adult heartworms in your dog or cat can cause a lot of issues. The main way that heartworms cause disease is by the adult worms clogging the heart and the surrounding vasculature, including the pulmonary artery. Typically, the first clinical signs of heartworm disease are coughing and exercise intolerance. In advanced stages of heartworm disease, signs of congestive heart failure are seen (weight loss, fluid accumulation in the chest and/or abdomen, etc.) Sudden death can also occur if the worms clog a major blood vessel to the brain or heart.

Cats often do not show any immediate signs of heartworm disease. However, some cats can have sudden allergic reactions to the adult heartworm, leading to sudden respiratory distress and death.



Treatment

Heartworm disease in dogs is treated with a medication called melarsomine, which kills the adult heartworms. The heartworms die and travel to the lungs, where they eventually get absorbed by the body. However, it is essential that the dog stay extremely quiet for the entire duration of heartworm treatment, as moving too much can cause the non-decomposed worms to lodge in the arteries and kill the dog.

Unfortunately, there are no good treatments for cats. Because many cats have an allergic reaction in the lungs to the heartworm, treating the heartworm with the medication used in dogs often causes death. The current recommended treatment is surgical removal of the adult heartworms (performed at a specialty clinic or a veterinary school), although approximately 40% of cats die during or after the procedure. Oftentimes, cats are treated for their clinical signs as they arise (oxygen therapy, steroids to help reactions in the lungs, etc.)

Prevention

The best way to keep your pet safe from heartworms is prevention! Year-round prevention is recommended, as mosquitos can persist in temperatures as low as 50°F, and periodic heat waves can be seen even in typically colder environments. Furthermore, heartworm tests are recommended once a year in both dogs and cats to make sure that they have not contracted heartworms, whether they are on heartworm prevention or not!

Best regards,
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