



Heartworm Disease in Cats

Dirofilaria immitis, the heartworm, is common in many parts of the United States. It is spread by mosquitoes and actually has a part of its development take place in the mosquito. The adult worms mainly live in the right side of the heart, but can be present in other locations as well. In the heart, they block normal blood flow, causing secondary heart failure. The female worms produce microscopic offspring called microfilaria which circulate in the blood. When a mosquito bites an infected cat, the microfilarias are ingested. They develop for 2-3 weeks in the mosquito, and the larvae are injected into the next dog that the mosquito feeds on. The larvae migrate through tissue over a 3-5 month period and end up in the cat's heart to begin the life cycle again.

The number of cases of heartworm disease diagnosed in cats is increasing year by year. Even here in the northeast, with a shortened mosquito season, we are seeing 1-5 cases per clinic. With an influx of rescue animals from the south already carrying heartworms, the percentage of positive cases is on the rise. Indoor cats are also susceptible. A recent North Carolina university study showed that 28% of the positive cases were exclusively indoor cats. However, less than 5% of cats take the monthly preventative.

The scary statistics continue. Heartworms do not even have to reach maturity in the heart to cause tissue damage in cats. The larval forms significantly harm the lungs of cats. Often the first symptom is a cough, which is easily confused with asthma or an upper respiratory infection, however, is much more serious and almost always fatal. The inflammatory reaction produced by larvae and adult worms can cause sudden death syndrome. Dogs, ferrets, seals and wild canids such as wolves and coyotes are also host for the disease. They are a natural reservoir of heartworms, which continues the spread of the disease in the wild.

Diagnosing heartworm disease in cats has been frustrating due to the fact that cats rarely have microfilaria in their blood. In addition, historically, there was not a reliable antigen test available to veterinarians for diagnosis. However, a SNAP test is now available and requires just a few drops of blood. The SNAP test takes 10 minutes and is performed in the veterinary office.

Cats cannot be treated with the same arsenical drugs used in dogs, so the only acceptable treatment is anti-inflammatory medicines and those which support heart function. This is a true demonstration of the old adage "an ounce of prevention is worth a pound of cure". Fortunately cats can take the same monthly preventative used on dogs, and there is also a topical treatment called Revolution, which is applied to the back of the cat's neck once a month. The topical also treats ear mites, fleas and intestinal worms.

The larval forms of heartworms are susceptible to preventative medications so they are killed before ever reaching the heart. It is therefore essential in preventing this disease to give a preventative every month, in the correct dose for your pet's weight, and to be sure the medication is swallowed and retained. If given properly, heartworm preventatives are almost 100% effective in killing the larvae before any irreversible damage occurs. To keep your cat healthy, have a test done annually, and use the monthly preventative year round, not just during mosquito season. For the cost of a medium pizza, you can protect your pet against this fatal disease.